

THE SYNTAX OF SENTENTIAL COMPLEMENTS
IN SHONA

by

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ABSTRACT

This study is concerned with embedded sentences in Shona which are not relative clauses. These complements seem to be of two types, namely, those dominated by NP which are referred to as noun phrase complements and those directly dominated by VP which are referred to as verb phrase complements. The case for each type is argued in the first chapter. The second chapter deals with the complementizing morphemes found in Shona (Zezuru dialect). A procedure is adopted by which complementizers are identified. This study also brings out the fact that infinitival complements and derived nominals should be treated differently. Evidence is adduced to show that the former are derived transformationally, but not the latter. Chapter Four discusses the insertion of complementizers into the underlying structure by analyzing first the transformational approach, then its inadequacy, and finally the phrase structure approach. The latter approach is preferred to the former on empirical evidence. The transformational rules which are mentioned in this study are described in the fifth chapter. Although some of the rules are dealt with fairly extensively, for others no more than an outline is given. The main purpose of this chapter was to provide only enough information about how these rules work in order to facilitate understanding of the thesis. The grammatical function of embedded sentences, that is, whether a given complement clause functions as a subject or an object etc, is the concern of Chapter Six.

I consider the main contribution of this thesis to be the chapters dealing with (a) the arguments for setting up the two types of sentence complements, (b) procedures for the discovery of complementizers, (c) the arguments showing how complementizers should be inserted into the underlying structure, and (d) the distribution in sentences of embedded clauses.

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INTRODUCTION

This study is an attempt to describe complement or embedded sentences in Shona. In part it is a reaction to the treatment of complement sentences in the constituent structure model as reflected in Shona Grammatical Constructions.¹ In that work there were some problems which were encountered and which remained unsolved. Some of them are outlined below.

In the work referred to above some complement sentences are treated as part of auxiliary verb phrases which are defined structurally as:

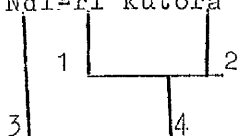
+ auxiliary verb radical + complement

This complement is in fact an embedded clause. What is implied in this structural definition is that the auxiliary verb radical and its complement are two immediate constituents of this intermediate structure. The auxiliary verb phrase is then said to be inflected for one or another of the moods in Shona. The inflected auxiliary verb phrase is defined as:

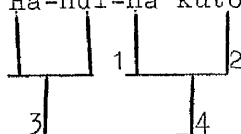
+ inflection + auxiliary verb phrase

implying that the inflection and the auxiliary verb phrase are two immediate constituents.

E.g. (1) Ndi-ri kutora mari² (I am taking some money)

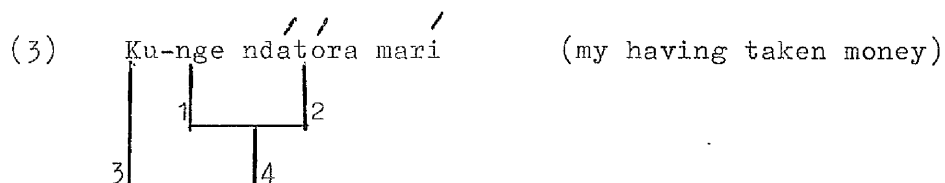


(2) Ha-ndi-na kutora mari² (I did not take any money)



(1) G. Fortune in Shona Grammatical Constructions, Part II (forthcoming).

(2) These examples are taken from Shona Grammatical Constructions, p.107.



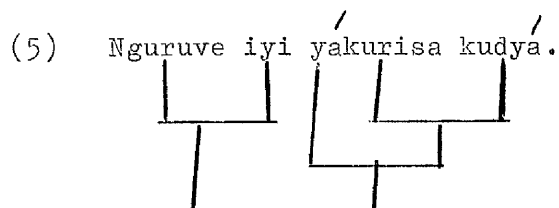
(The horizontal line between 1 and 2 in each example represents the auxiliary verb phrase, while the line between 3 and 4 represents the inflected auxiliary verb phrase.)

Although this analysis correctly informs us that there are two verbs in each of these sentences above, it however fails to tell us what the grammatical subject of the verb kut^{/'}ora is in (1) and (2) and of kunge in (3), nor are we told what has happened to these subjects in the course of the derivation. If our grammar is going to be adequate all these facts must be described.

The ambiguity of some sentences which contain embedded clauses can hardly be accounted for in the constituent structure model. To this end consider the following sentences:

(4) Nguruve iyi yakurisa kudya^{/'}.

This sentence may mean either that the pig is so old that it cannot eat or that the pig is so old that its meat is difficult to be eaten. That is, on one reading the noun phrase nguruve iyi is the subject of the verb kudya^{/'} while on the other reading it is a direct object. The analysis of sentence (4) would be something like this:



Whatever the correct analysis of this sentence may be according to the structuralists, the crucial point nevertheless is that there is no way of showing in the analysis itself that the sentence has two semantic readings. Yet it is essential to describe how this sentence came to be ambiguous.

A similar problem arises in analysing sentences which are structurally homonymous like those in (6) and (7).

(6) Hukú yácho inoshupa kudya.

(The chicken is difficult to eat)

(7) Hukú yácho inoda kudya.

(The chicken likes to feed.)

A constituent type of grammar would analyse these two sentences in the same way that (5) is analysed. That is, (6) and (7) would have an identical analysis. But our intuition as native speakers of Shona reveals that in (6) the noun phrase hukú yácho is a direct object of the verb kudya, while in (7) the same noun phrase is a subject of kudya. Therefore if our grammar is to be descriptively adequate it must be reflected in the analysis that the grammatical relationship between hukú yácho and kudya is different in the two sentences (6) and (7).

In any given sentence we would like our grammar to be able to describe the relationship that obtains between the various constituents. Now if we examine sentences (8) and (9) below we notice that the strings achifára and yakatengwa kwaGatora actually belong to the subject noun phrases murúme and mombe iye respectively to which they refer.

(8) Murúme akáita basa ráké achifára.

(The man did his work happily.)

(9) Mombe iye yakarúmwá nebére, yakatengwa kwaGatora.

(That cow was killed by a hyena, which was bought from Gatora's kraal.)

In a constituent type of grammar it would be difficult to show that the complement clauses achifára and yakatengwa kwaGatora belong to the subject noun phrases of these sentences, or at least that they start off from these subject noun phrases.

Another process which a constituent structure type of grammar seems ill-equipped to handle is the transformation commonly referred to in the literature as raising. Towards this end consider the sentences in (10).

(10) a. Vanhu vanoziwa kuti ndiwe wakaita zvinhu izvi.

(The people know that it was you who did these things.)

b. Vanhu vanokuziwa kuti ndiwe wakaita zvinhu izvi.

(The people know you to have done these things.)

The two sentences in (10) mean more or less the same thing. The direct object of the verb -ziwa in (10a) is kuti ndiwe wakaita zvinhu izvi and the noun phrase iwe (you) is part of the embedded clause. But in (10b) the direct object of -ziwa is iwe which is represented by its pronominal form -ku-. I do not know how a constituent type of grammar would cope with the analysis of these two sentences while at the same time accounting for their synonymy.

0.2. In part this study is a test of the theories, as applied to Shona, that have been propounded in the generative transformational grammar model concerning sentential complements. The study, though basically carried within the framework of Aspects of the Theory of Syntax,³ incorporates much of the modification which that work has undergone since its publication in 1965.

3. N. Chomsky in Aspects of the Theory of Syntax, M.I.T. Press, Cambridge, (1965).

I.0 SENTENTIAL COMPLEMENTS OF VERBS

I.1 It is a generally accepted fact that the number of sentences in any language is potentially infinite. That this is true is easy to comprehend because sentences may be constructed with other sentences embedded in them. This process of recursion is one of the properties of language. Through recursion the phrase structure rules¹ which generated the first sentence may be applied again to produce an embedded sentence, and the process can be repeated several times. The most commonly discussed processes of recursion are conjunction, relativization and sentential complementation (or predicate complementation, as it is sometimes called). This study will be concerned almost exclusively with sentential complementation. Sentential complementation may be divided into noun phrase complementation and verb phrase complementation.

I.2 The Case For Noun Phrase Complementation

In order to appreciate more fully the arguments which follow not only in this chapter, but in later chapters as well, it may be as well to discuss first how we can discover (a) noun phrases which are in a subject position and (b) those which are in an object position.

I.2.1 Tests for noun phrases in subject position

Although there may be many tests for discovering noun phrases in subject position only two will be discussed here. The quantity of tests by itself is inconsequential. What is important is to be able to recognize a noun phrase that is functioning as a subject .

1. See Appendix A for the phrase structure rules of Shona.

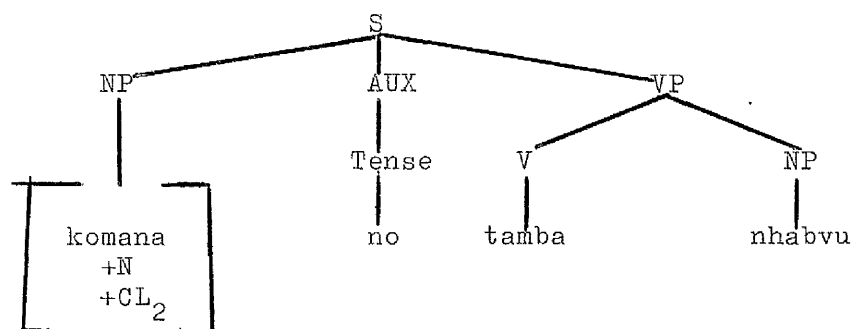
I.2.1.1 First, if there is concordial agreement between a noun phrase and a predicate, that noun phrase is functioning as a subject. In other words, if a noun phrase has its class feature copied on to the auxiliary in the structural change of the Gender Copying rule, that noun phrase is in a subject position. For instance, given the following sentence:

(1) Vakómaná vanotámhá nhabvu.

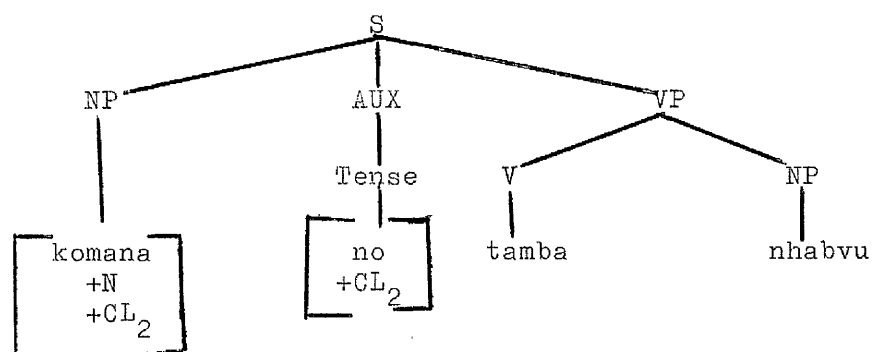
(Boys play football.)

it may be represented roughly by the following tree in (2). There is an obligatory rule in Shona which states that whenever there is a noun phrase which occurs before AUX, copy the class feature of that noun phrase on to AUX as in (3) below. The rule of Gender Copying will be presented formally in Chapter 5.

(2)



(3)



Here are more examples to illustrate what is meant by concordial agreement between a noun phrase in subject position and its predicate:

(4) a. Chingwa (7) chakaóra².

(The bread is mouldy.)

2. The number placed after a noun phrase here and in the rest of this study indicates the noun class to which the noun phrase belongs.

b. Zvengo' (8) zvawa'.

(The walls fell down.)

c. Mazai' (6) achapúnzika'.

(The eggs will get broken.)

d. Rufu' (11) runouya' kumunhu wése wése.

(Death comes to every person.)

e. Mumba' (18) maítónhóra'.

(inside the house - it was cold =

it was cold inside the house.)

1.2.1.2 The second test involves the interrogative pro-forms ani' and chii'. The form ani is used for human noun phrases while chii' is used for non-human noun phrases. In this case the interrogative pro-forms, in addition to substituting for a noun phrase, are stabilised, or in other words turned into a predicate, with the rest of the sentence becoming a relative clause. With regard to ani' this is done by the use of the formative ndi. If, for instance, we wish to find out whether or not vakomana' in (1) is a subject noun phrase, we first of all find out whether it has the feature /human/ or not. In this case we see that it has the feature /human/. As we saw earlier on the interrogative pro-form which we need in this case is ani'. Applying what has been said above, (1) is transformed into (5).

(5) Ndiani' anótamba' nhabvu' (reply: vakomana')

(it is who - who plays - football =

Who plays football? (reply: boys))

Note that ani' as such has singular reference and this explains why we have the class feature a rather than va before the tense sign no in (5). Notice also the difference in their tone pattern between vanótamba' nhabvu' in (1) and anótamba' nhabvu' in (5). The former is in the indicative mood while the latter is in the relative mood. However this is not to say that this is the only difference

there is between the indicative and relative constructions.

If we want to find out whether chingwa in (4a) is a subject noun phrase or not we proceed in the same way. Here we discover that chingwa has the feature $\left[\text{-human} \right]$. Therefore the interrogative pro-form which we are going to employ is chii. We transform the structure which underlies (4a) into that which underlies (6).

(6) Chii chaka'óra? (reply: chingwa)

(lit. it is what - that is mouldy=

What is mouldy?) (reply: bread)

In this case the result of the stabilization or predication of chii consists of raising the tone on the class affix chi and lowering the tone on the following syllable. Here are further illustrative examples;

(7) a. (i) Mwana' (1) akarára.

(The child is asleep.)

(ii) Ndiani' akarara? (reply: mwana')

(lit. it is who - who is asleep =

Who is asleep?) (reply: the child)

b. (i) Sara' (1a) aenda kunoché'rá mvúrá.

(Sara - went - to fetch - water =

Sara has gone to fetch some water.)

(ii) Ndiani' aenda kunoché'rá mvúrá? (reply: Sara')

(it is who - who went - to fetch - water =

Who has gone to fetch some water?) (reply: Sara')

c. (i) Harahwa (9) yaitónhórwa nechando.

(old man - was being cooled - by cold =

The old man was feeling cold.)

(ii) Ndiani aitonhorwa nechando? (reply: harahwa)

(it was who - who was being cooled - by cold =

Who was feeling cold?) (reply: the old man)

d. (i) Mukuyu (3) wakapunzika.

(fig-tree - fell down =

The fig-tree fell down.)

(ii) Chii chakapunzika? (reply: mukuyu)

(it is what - that fell down =

What fell down.) (reply: the fig-tree)

e. (i) Mango (9) yakaibva.

(mango - is ripe =

The mango is ripe.)

(ii) Chii chakaibwa? (reply: mango)

(it is what - that is ripe =

What is ripe?) (reply: the mango)

I.2.2 Tests for noun phrases in object position

For discovering noun phrases which are in object position four procedural methods will be discussed in this subsection.

I.2.2.1 The Passive test

Let us consider the sentence below:

(8) Toni anoda Koni.

(Toni loves Koni.)

In this sentence there are two noun phrases, namely Toni and Koni.

If this sentence is transformed into the passive it becomes

(9) Koni anodiwa naToni.

(Koni - is loved - by Toni =

Koni is loved by Toni.)

What the passive transformation did was to interchange the noun phrase Toni and Koni. Koni is now the grammatical subject. The claim made by passive test is that the string which is made the

subject by transformation is an object noun phrase. Now consider the following sentences:

- (10) a. Mwana' ákuvara ruokó.
 (child - got hurt - arm =
 The child hurt its arm.)
- b. *Ruokó' rwákuvarwa némwana' ³.
 (arm - was hurt - by child =
 *Its arm was hurt by the child.)
- (11) a. Bonda' ákachéka vana' nzara'.
 (Bonda - cut - children - finger-nails =
 Bonda cut the children's finger-nails.)
- b. Vana' vakachékwá nzara' naBonda'.
 (children - were cut - finger-nails- by Bonda =
 The children had their finger-nails cut by Bonda.)
- c. *Nzara' dzáchékwá vana' naBonda'.
 (finger-nails - were cut - children - by Bonda =
 *Finger-nails were cut the children by Bonda.)
- (12) a. Ambuya' vakapá muzukúru doro kaviri'.
 (grandmother - gave - grandson - beer - twice =
 The grandmother gave her grandson some beer twice.)
- b. Muzukuru' akapihwa' doro kaviri' naambuya'.
 (grandson - was given -beer - twice - by grandmother =
 The grandson was given some beer twice by his grandmother)
- c. Doro' rákapihwa' muzukúru kaviri' naambuya'.
 (beer - was given - grandson - twice - by grandmother =
 Beer was offered to the grandson twice by his grandmother)

3. The asterisk (*) will be used throughout this work to signify an ungrammatical sentence.

d. *Kaviri' kakapihwa' muzukuru' doro naambu'a.

(*twice - was given - grandson - beer - by grandmother.)

By the passive transformation ruoko' in (10b), vana' and nzara' in (11b) and (11c), and muzukuru', doro and kaviri' in (12b), (12c) and (12d) respectively have become the new grammatical subjects. The ungrammaticality of (10b) indicates that ruoko' in (10a) is not an object noun phrase. In (11a) only vana' is an object noun phrase as is evidenced by the grammaticality of (11b), and the ungrammaticality of (11c). The well-formedness of the passive sentences in (12b) and (12c) shows that muzukuru' and doro are object noun phrases. Kaviri', although it is a noun phrase of some kind, at least in form, is not an object noun phrase as the ungrammaticality of (12d) shows.

Locative noun phrases occurring after the verb can be transposed to the subject position by the passive transformation indicating that according to this test such locative noun phrases are to be regarded as object noun phrases.

(13) a. Jeke' akaona' nyoka' kurukova.

(Jack - saw - a snake - at river =
Jack saw a snake at the river.)

b. Nyoka' yakaonekwa' kurukova naJeke.

(snake - was seen - at river - by Jack =
A snake was seen at the river by Jack.)

c. Kurukova kwakaonekwa' nyoka' naJeke.

(at river - was seen - a snake - by Jack =
A snake was seen at the river by Jack.)

(14) a. VekwaChari' vanochera' mvura' patsime' iri.

(Chari's people - fetch - water - at well - this =
Chari's people get their water supply from this well.)

- b. Mvura inocherwa patsime iri nevekwaChari.
(water - is fetched - at well - this - by Chari's people
= Water is fetched from this well by Chari's people.)
- c. Patsime iri panocherwa mvura nevekwaChari.
(at well - this-is fetched - water - by Chari's people =
Chari's people fetch their water from this well.)
- (15) a. Sekai akakanda Toko bhora kuchikoro.
(Sekai - threw - Toko - ball - at school =
Sekai threw a ball to Toko at school.)
- b. Toko akakandwa bhora kuchikoro naSekai.
(Toko - was thrown - ball - at school - by Sekai =
Toko was thrown a ball at school by Sekai.)
- c. Bhora rakakandwa Toko kuchikoro naSekai.
(ball - was thrown - Toko - at school - by Sekai =
A ball was thrown to Toko at school by Sekai.)
- d. Kuchikoro kwakakandwa Toko bhora naSekai.
(at school - was thrown - Toko - ball - by Sekai =
Sekai threw a ball to Toko at school.)
- (16) a. Zanza akaudza Mafaro nyaya iye kubhawa.
(Zanza - told - Mafaro - story - that - at beer hall =
Zanza told Mafaro that story at the beer hall.)
- b. Mafaro akaudzwa nyaya iye kubhawa naZanza.
(Mafaro - was told - story - that - at beer hall -
by Zanza =
Mafaro was told that story at the beer hall by Zanza.)
- c. Nyaya iye yakaudzwa Mafaro kubhawa naZanza.
(story - that - was told - Mafaro - at beer hall -
by Zanza. =
That story was related to Mafaro at the beer hall
by Zanza.)

d. Kubháwa kwákaúdzwá Mafáro nyayá íye naZanza.

(at beer hall - was related - story - that -Mafaro -
by Zanza =

Mafaro had that story narrated to him at the beer hall
by Zanza.)

Although a locative noun phrase which occurs after the verb can be transposed to the subject position by the passive transformation, there seem to be degrees of acceptability of the resulting sentences depending on the number of other noun phrases occurring before it in the input sentence. For instance, in (13a) and (14a) the locative noun phrases kurukova and patsíme iri respectively each constitutes the second object noun phrase. But in (15a) and (16a) the locative noun phrases kuchikóro and kubháwa respectively each forms the third object noun phrase. The locatives which are mentioned above form the grammatical subjects of the passive sentences in (13c), (14c), (15d) and (16d), respectively. Nevertheless, we know intuitively that the sentences in (13c) and (14c) are more acceptable than those in (15d) and (16d). Still all the four sentences are grammatical. However since locative complements can occur after almost any verb in Shona one wonders whether they ought really to be looked upon as object noun phrases.

A noun phrase which expresses time does not appear to be confirmed as an object noun phrase by the passive test as the following examples will illustrate :

(17) a. Mukómana ákabátá mbéva nezúro.

(boy - caught - mice - yesterday =

The boy caught some mice yesterday.)

b. *Nezúro ákabátwa mbéva némukómaná.

(*Yesterday was caught some mice by the boy.)

(18) a. Mapúrisa áchásvíka kumbá kwényú mangwána.

(policemen - will arrive- at home - your - tomorrow =

The policemen will get to your house tomorrow.)

b. Kumbá kwényú kuchásvíkwa mangwána némapúrisa.

(at your home - will be arrived - tomorrow - by policemen =

The policemen will get to your house tomorrow.)

c. *Mangwána áchásvíkwa kumbá kwényú némapúrisa.

(* Tomorrow - will be arrived - at your house - by the
policemen.)

I.2.2.2 The interrogative Pro-form test

This test involves substituting the interrogative pro-forms ani? and chii? for the noun phrase which we suspect to be an object noun phrase. If the answer to the resulting question is a grammatical sentence, that noun phrase is an object noun phrase. The examples in (19) - (22) show how this test works.

(19) a. Toni ánodá Koni. (see (8))

b. Toni ánodá ani? (reply: Koni)

(Toni loves whom?) (reply: Koni)

(20) a. Mwana ákakuvárá ruókó. (see (10))

b. Mwana ákakuvárá chii? (reply: ruókó)

(child - was injured-what =

The child was injured where?) (reply: on the arm)

(21) a. Bonda ákachéka vaná nzará. (see (11))

b. Bonda ákachéka ani nzará? (reply: vaná)

(Bonda - cut - whom - finger-nails =

Bonda cut whose finger-nails? (reply: the children's)

c. Bonda ákachéka vaná chii? (reply: nzará)

(Bonda - cut - children - what =

Bonda cut the children's what? (reply: finger-nails)

(22) a. Ambúya vákapá múzúkúru doro kaviri'. (see 12)

b. Ambúya vákapá ani' doro kaviri'? (reply: múzúkúru)

(grandmother - gave - whom - beer - twice =

Who did grandmother give beer twice? (reply: her grandson)

c. Ambúya vákapá múzúkúru chii' kaviri'? (reply: doro)

(grandmother - gave - grandson - what - twice =

What did grandmother give to her grandson twice?

(reply: beer))

d. *Ambúya vákapá múzúkúru doro chii'? (reply: kaviri')

(*The grandmother - gave - her grandson - beer - what?)

(reply: twice))

Observe that this test will confirm ruókó' and nzará' in (20) and (21) respectively as object noun phrases. But in actual fact these cannot be said to be object noun phrases in the true sense. To say that ruókó' here is an object noun phrase is counter-intuitive. In this respect it would appear that this test is less reliable than the passive test. Nonetheless in view of the fact that the nature of the complements of the verbs of the type exemplified by -kúvárá' in (20) and -chéká' in (21)⁴ is not clearly understood at this stage in Shona linguistic studies one cannot make a categorical statement as to which of these two tests is more reliable than the other.

Locative noun phrases occurring after the verb will be rejected as object noun phrases by the interrogative pro-form test.

(23) a. Jeke ákaóná nyóká kúrukova. (see 13)

4. For a comment on verb phrases featuring verbs of this type see p. 180 - 182.

- b. *Jeke akaóna nyóka chii? (reply: kurukova)
 (*Jack - saw - a snake - what)
- (24) a. VekwaChari vanocherà mvura patsime iri. (see (14))
 b. *VekwaChari vanocherà mvura chii? (reply: patsime iri)
 (*Chari's people - fetch - water - what?)
- (25) a. Sekai akakanda Toko bhóra kuchikoro. (see(15))
 b. *Sekai akakanda Toko bhóra chii? (reply: kuchikoro)
 (*Sekai - threw - Toko - a ball - what?)

As was the case with the passive test noun phrases which indicate time are not confirmed as object noun phrases by this test.

- (26) a. Mukómana akabata mbéva nezuro. (see (17))
 b. *Mukómana akabata mbéva chii? (reply: nezuro)
 (*The boy - caught - mice - what?)
- (27) a. Mapurisa achásvika kumba kwényu mangwana (see (18))
 b. *Mapurisa achásvika kumba kwényu chii? (reply: mangwana)
 (*Policemen - will arrive - at home - your - what?)

I.2.2.3 The Object Anaphora test

The transformational rule of Object Anaphora is discussed in some detail in (5.13). What it is briefly is that in Shona some noun phrase complements of verbs may be represented by their pro-forms (or object prefixes as they are often referred to in Bantu linguistic studies) if the proper structural description for this rule is met. Such pro-forms are normally reflexes of the noun prefix. The claim that is made by this test is that a noun phrase complement which can be represented by its pro-form by this transformation is an object noun phrase. The application of this test to the sentences (8), (10), (11), (12), (13), (15) and (17) yields the sentences in (28) - (34) respectively.

- (28) Toni' anómuda. (referring to Koni)
(Toni loves her.)
- (29) *Mwana' akarúkuvárá. (referring to ruókó)
(*The child hurt it.)
- (30) a. Bonda' akaváchéka' nzará. (referring to vana)
(Bonda - cut them - finger-nails =
Bonda cut their finger-nails.)
- b. *Bonda' akadzichéka' vana. (referring to nzara)
(Bonda - cut them - children =
*Bonda cut them the children.)
- (31) a. Ambuya vakamupá doro kaviri. (referring to muzukuru)
(grandmother - gave him - beer - twice
The grandmother gave him beer twice.)
- b. Ambuya vakaripá muzukuru kaviri. (referring to doro)
(grandmother - gave it - grandson - twice =
The grandmother gave it to her grandson twice.)
- c. *Ambuya vakakápá muzukuru doro. (referring to kaviri)
(*The grandmother - gave it - her grandson - some beer.)
- (32) a. Jeke akaioná kurukova. (referring to nyóká)
(Jack - saw it - at river =
Jack saw it at the river.)
- b. Jeke akakuóna nyóká. (referring to kurukova)
(Jack - saw at it - a snake =
Jack saw a snake there.)
- (33) a. Sekai akamukánda bhóra kuchikoro. (referring to Toko)
(Sekai - threw her - a ball - at school =
Sekai threw the ball at her at school.)
- b. Sekai akaríkanda Toko' kuchikoro; (referring to bhóra)
(Sekai - threw it - Toko - at school =
Sekai threw it to Toko at school.)

c. }Sekai ákakukánda Toko bhora. (referring to kuchikoro)

(*Sekai - threw at it - Toko - a ball =

*Sekai threw the ball to Toko at school.)

(34) a. Mukomana ákai**á**bata nezuro. (referring to mbewa)

(boy - caught it - yesterday =

The boy caught it yesterday.)

b. *Mukomana ákam**u**bata mbewa. (referring to nezuro)

(*The boy - caught it - the mouse.)

Notice that according to this test, as according to the passive test, both ruoko and nzara in (29) and (30) are not object noun phrases. Sentence (33c) is very low on the scale of acceptability. Most speakers would reject it as ill-formed, nevertheless it is still grammatical. This seems to confirm the remark which was made in (I.2.2.1) above concerning locatives. The passive test and the object anaphora test seem to confirm object noun phrases of the same type.

I.2.2.4 The Pseudo-cleft test

This test operates roughly as follows: the noun phrase which is suspected to be an object noun phrase is taken out from its position and placed at the beginning of the sentence. The new position it now assumes in the sentence may be immediately before or after the subject noun phrase. This is followed by the stabilised form of its pro-form, which in turn is followed by the rest of the sentence in the objective relative. This is shown in the examples below. The noun phrases which are being tested are underlined.

(35) a. Vana vákaba mango.

(The children stole some mangoes.)

b. Vana, mango ndidzo dzavákaba.

(children - mango - it was they - which they stole =

It was some mangoes which the children stole.)

- (36) a. Amái vakáratidza mwanásikana wávo zvinhu zvekuíta.
 (mother - showed - daughter - her - things - of doing =
 The mother showed her daughter what to do)
- b. Amái, mwanásikana wávo ndiye wavakaratidza
 zvinhu zvekuíta.
 (Mother - daughter - her - it was she - whom she
 showed - things - of doing =
 It was her daughter whom the mother showed what to do.)
- c. Amái, zvinhu zvekuíta ndizvo zvavakaratidza
 mwanásikana wávo.
 (mother - things of doing - it was they - which
 she showed - daughter - her =
 It was what to do that the mother showed her daughter.)

However this test by itself is unreliable because it will confirm
 as object noun phrases some noun phrases which will not be passed
 by the other tests as the following examples show:

- (37) a. Mwana'akuvara ruoko'. (see (10a))
 b. Mwana, ruoko ndirwa rwaakuvara'.
 (child - arm - it is it - which she hurt =
 It was the arm which the child hurt itself.)
- (38) a. Bonda'akacheka vana'nzara'. (see (11a))
 b. Bonda, vana ndivo vaakacheka nzara'.
 (Bonda - children - it was they - whom he cut - finger-
 nails =
 It was the children whom Bonda cut their finger-nails.)
- c. Bonda, nzara ndidzo dzaakacheka vana'.
 (Bonda - finger-nails - it was they - whom he cut -
 children =
 It was the children's finger-nails that Bonda cut.)

This is however more of a test for discovering noun phrases in

a sentence than for discovering object noun phrases. It has been included here though as it will help establish that some sentential complements are actually under the direct domination of NP.

Of these tests the passive and the object anaphora appear to be the most reliable, with the pseudo-cleft as the least reliable. Maybe further investigation into the way object noun phrases behave in sentences will result in the discovery of a more rigorous test or tests. For the purpose of this study however identification of object noun phrases will be based on these four tests.

I.2.3 Noun Phrase Complements

Turning now to our discussion of noun phrase complements let us consider the following sentences:

- (39) a. Mombe dzáko' dzádyá chibagé' chángu.
 (cows - your - ate - maize crop - my =
 Your cows ate up my maize crop.)
 b. Chibagé' chángu chádyiwa nemombe dzáko'.
 (maize crop - my - was eaten - by cows - your =
 My maize crop was eaten up by your cows.)

It is uncontroversial that these two sentences are related to each other structurally. One is an active and the other a passive sentence. Semantically they are synonymous. Now consider the following sentences:

- (40) a. Mwoyo ánozi'vá kuti Kóndó ákabá mari'.
 (Mwoyo - knows - that - Kondo - stole - money =
 Mwoyo knows that Kondo stole some money.)
 b. Kuti Kóndó ákabá mari' zvinoz'í'vikanwa naMwoyo,
 (that - Kondo - stole - money - is known - by Mwoyo =
 That Kondo stole some money is known by Mwoyo.)

The two sentences in (40) are comparable to the two sentences in (39). That is, one is active and the other is passive. But whereas (39a) has as its direct object a noun phrase, (40a) has a sentence, namely, kuti Kóndó ákaba mari, as its verb complement. For convenience such sentences as the one underlined which are embedded in others will be referred to as complement sentences or complement clauses. The word kuti in this complement sentence cannot be regarded either as a noun or as noun phrase in its own right because it cannot occur by itself in either a subject or an object position as noun phrases normally do. Furthermore as we shall see later the word kuti has not the feature $[+class]$ which every noun in Shona has. So what we have in (40a) is a verb which is accompanied by a sentence (S) as direct object. This being the case the passive rule, for instance, has to be altered in order to accommodate this S object. That this object is an S of some sort can be shown by, say, applying the passive rule within it. If this is done the result is sentence (41).

(41) Mwoyo ánoziva kuti mari yakabiwa naKóndó.

(Mwoyo - knows - that - money - was stolen - by Kondo =
Mwoyo knows that the money was stolen by Kondo.)

This is by no means the only way of showing that the string kuti Kóndó ákaba mari is an S of some kind. This string can undergo the transformational rules of pseudo-cleaving, interrogative pro-form and object anaphora as is shown in (42), (43) and (44) respectively. All these transformations apply within sentences.

(42) Mwoyo ánoziva kuti Kóndó ndiye akaba mari.

(Mwoyo - knows - that - Kondo - it is he - who stole -
money =

Mwoyo knows that it was Kondo who stole the money.)

- (43) Mwoyo ánozívá kúti Kóndó ákabá chíi? (reply: mari)
 (Mwoyo - knows - that - Kondo - stole - what =
 Mwoyo knows that Kondo stole what? (reply: the money))
- (44) Mwoyo ánozívá kúti Kóndó ákaíba. (referring to mari)
 (Mwoyo - knows - that - Kondo - stole it =
 Mwoyo knows^w that Kondo stole it.)

Let us assume that the passive rule in Shona operates as follows

- (45) X - Passive - NP₁ - AUX - V - Y - NP₂ - Z
- | | | | | | | | | |
|-----|---|---|---|---|-----|---|---|----------|
| SD: | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| SC: | 1 | ∅ | 7 | 4 | 5+w | 6 | ∅ | 8 na + 3 |
-

Now if the direct object of a verb can be an S as well as an NP there is need to modify our formulation of the passive rule in order to accommodate cases of an object sentence. This is done in (46) below:

- (46) X - Passive - NP₁ - AUX - V - Y - $\left\{ \begin{matrix} \text{NP}_2 \\ \text{S} \end{matrix} \right\}$ - Z
- | | | | | | | | | |
|-----|---|---|---|---|-----|---|---|----------|
| SD: | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| SC: | 1 | ∅ | 7 | 4 | 5+w | 6 | ∅ | 8 na + 3 |
-

But now examine the following two sentences:

- (47) a. Kutí ásvíké kúnó zvinoratidza kuti ánodá mukádzi wáké.
 (that - he arrive - here - shows - that - he loves -
 wife - his =
 For him to come here shows that he loves his wife.)
- b. Kutí ánodá mukádzi wáké zvinoratidzwa nekúti
 ásvíké kúnó.
 (that - he loves - wife - his - is shown - by that -
 he arrives - here =
 That he loves his wife is shown by his coming here.)

The string kuti ásviké kúnó is the subject of the sentence in (47a). But this subject consists of an S. Sentence (47b) is the passive sentence of (47a). So if S can also function as a subject, this ought to be reflected in our formulation of the passive rule which is modified below as (48).

$$(48) \quad X - \text{Passive} - \left\{ \begin{array}{c} \text{NP}_1 \\ \text{S} \end{array} \right\} - \text{AUX} - \text{V} - \text{Y} - \left\{ \begin{array}{c} \text{NP}_2 \\ \text{S} \end{array} \right\} - \text{Z}$$

$$\begin{array}{rcccccccc} \text{SD:} & 1 & 2 & 3 & 4 & 5 & 6 & 7 & 8 \\ \text{SC:} & 1 & \emptyset & 7 & 4 & 5+w & 6 & \emptyset & 8 \end{array} \xrightarrow{\text{na} + 3}$$

At this stage, although our grammar may be adequate from an observational viewpoint, it reveals that generality is very much diminished. This is brought about, not because a string like kuti ásviké kúnó is an S of some sort, but because of the assumption that such a phrase cannot be regarded as a noun phrase. If in our grammar NP is permitted to dominate S as well as N (noun), then the original formulation of the passive rule in (45) will effectively generate the sentences in (39b), (40b) and (47b).

Now let us see what phrase structure rules are required for noun phrase complementation. As for any sentence the following rules apply:

- (49) a. S -----> NP + AUX + PDP
 b. PDP -----> VP (PP)(ADV)
 c. VP -----> V (NP)

Then in order to produce the structures which underlie complement sentences there is need for the following additional rule:

- d. NP -----> N(\$).

The expansion of NP in (49d) differs from another possible expansion of NP, namely, the one which produces relative clauses.

(NP -----> NP + S)⁵.

There are however instances in the language where phrases which look like those which have just been discussed (i.e. they are to be analysed as instances of S at some level) do not behave like noun phrases. Such are the complement sentences in (50) - (52).

(50) a. Sekúru ává kúti áéñdé nhási.

(uncle - is now - to say - he goes - today =

Uncle now says that he should go today.)

b. *Kúti áéñdé nhási zváviwa nasekúru.

(*To say - he goes - today - is now being - by uncle)

c. *Sekúru ává chíi? (reply: kúti áéñdé nhási)

(*Uncle - is now - what?)

d. *Sekúru ákuvá. (referring to kúti áéñdé nhási)

(*Uncle - is now it.)

(51) a. Ali akányátsa kuróvá Foreman.

(Ali - did well - to beat - Foreman =

Ali clearly defeated Foreman.)

b. *Kuróvá Foreman kwakányatswa naAli.

(*To beat - Foreman - was done well - by Ali.)

c. *Ali akányátsa chíi? (reply: kuróvá Foreman)

(*Ali - did well what?)

5. For a discussion of the various analyses of the relative construction see Major Syntactic Structures of English, R.P. Stockwell, Paul Schachter and B. Hall Partee (eds).

- d. *Ali akázvinyát'sa. (referring to kurová Foreman)
 (*Ali did it well.)
- (52) a. Garwe anofánirá kuti áúyé mangwana.
 (Garwe - ought - that - he comes - tomorrow =
 Garwe must come tomorrow.)
- b. *Kuti áúyé mangwana zvinofánirwa naGarwe.
 (*That - he comes - tomorrow - is ought - by Garwe.)
- c. *Garwe anofánirá chii? (reply: kuti áúyé mangwana)
 (*Garwe - ought - what?)
- d. *Garwe anozvifánirá. (referring to kuti áúyé mangwana)
 (*Garwe - ought it.)

In the sentences (50), (51) and (52) attention was centred on the complement sentences kuti áénde nhasi, kurová Foreman and kuti áúyé mangwana respectively. The (b), (c) and (d) sentences in (50) - (52) show the results of the passive, the interrogative pro-form and the object anaphora transformations when applied to the deep structures which underlie the (a) sentences. The sentences in (b) - (d) are all ill-formed.

If these transformations are applied to the structure which underlies (40) the sentences which result are those in (53) below.

- (53) a. Mwoyo ánoziwá kuti Kondo ákaba mari. (see (40a))
 b. Kuti Kondo ákaba mari zvinozivikanwa naMwoyo.
 (That Kondo stole some money is known by Mwoyo.)
- c. Mwoyo ánoziwá chii? (reply: kuti Kondo ákaba mari)
 (Mwoyo knows what?)
- d. Mwoyo anozviziwá. (referring to kuti Kondo ákaba mari)
 (Mwoyo knows it.)

Although the strings kuti aendé nhási and kuti áúyé mangwana in (50) and (52) respectively are similar to the string kuti Kóndó ákábá mari in (53) in their structure, they nevertheless differ from it in that they do not behave like noun phrases as it does. It is observed that the string kuti Kóndó ákábá mari passes these three tests for object noun phrases as is shown in (53). So this string is an instance of an object noun phrase. That the string kuti Kóndó ákábá mari is functioning as a noun phrase in this sentence is further substantiated by the pseudo-cleft transformation as indicated in (54).

(54) Kuti Kóndó ákábá mari ndízvo zvaanozíva Mwoyo.

(that - Kondo - stole - money - it is it - what he knows -
Mwoyo =

That Kondo stole some money is what Mwoyo knows.)

Notice that the three complement sentences from (50) to (52) inclusive all fail the tests for object noun phrases.

If, for argument's sake, it is still maintained that NP may not dominate S, then it means that, for instance, in our passive rule in (48), we have to add a caveat which states in a rather unclear manner that only sentences such as are found in (40a) and (47a), and not those in (50), (51) and (52), may feature in a passive transformation.

However, if on the other hand we allow NP to dominate S as well as N, then the complement sentences in (40a) and (47a) will be regarded as instances of S which is dominated by NP, while those in (50), (51) and (52) will be instances of S under the direct domination of VP. That is, the complement sentences in (50) - (52) will not be dominated by NP, hence the passive *and all the other* transformations which are employed as tests for object noun phrases will block. That being the case, there will be no need to enter

S separately from NP in the passive rule as was done in (48). The original formulation of the passive rule in (45) will suffice. There will be no need to differentiate in the phrase structure rules which introduce the string chibagé' chángu in (39a) and kuti Kóndó ákaba' mari' in (40a) in the derivation of these two sentences. (Of course once both have been introduced as NP by the phrase structure rules, the two noun phrases may now be expanded differently.) Indeed to make this distinction would be an admission of failure to capture a linguistic generalization, and that would weaken the grammar considerably. On the other hand, not to recognize that the string Kuti Kóndó ákaba' mari' is an instance of S at some stage in the derivational history of the noun phrase is equally a mistaken approach. If the approach suggested in this paragraph is adopted, the caveat which was mentioned above falls away as it becomes unnecessary. Furthermore, if NP dominates S in (40), but not in (50), (51) and (52), then our grammar automatically predicts that (40b) is grammatical, while (50b-d), (51b-d) and (52b-d) are not.

The approach which says that an NP can dominate an S will help to explain at least one phenomenon in Shona, namely, the behaviour of the kuti clauses. To this end consider the following sentences:

- (55) a. Kuti údzokére kumushá zvinonetsa.
 (that- you return - home - is worrying =
 For you to go back home is difficult.)
 b. Zvinonetsa kuti údzokére kumushá.
 (It is difficult for you to go back home.)

- (56) a. Mwoyo ánozi'vá kúti Kóndó ákaba' mari'. (see (40a))
 b. Kuti Kóndó ákaba' mari' zvinózi'vika'na naMwoyo. (see (40b))
 c.. Zvinózi'vika'na naMwoyo kuti Kóndó ákaba' mari'.

(It is known by Mwoyo that Kondo stole some money.)

The sentences in (55) are structurally related to each other, and so are those in (56). The kuti clauses in both (55) and (56) are instances of S under the domination of NP. It is an interesting observation that a kuti clause in a subject position may optionally be postposed to the end of the sentence. In (55b) it is a kuti clause in a subject position in an active sentence that has been postposed, and in (56c) it is a kuti clause in a subject position but in a passive sentence that has been so postposed. This postpositioning of a subject kuti clause, one might say, is not different from the postpositioning of an ordinary NP, for in Shona noun phrases in subject position are not infrequently placed at the end of their sentence as the following sentences show.

- (57) a. Mombe dziye dzanéta zvinó.

(oxen - those - are tired - now =
 Those oxen are tired now.)

- b. Dzanéta zvinó mombe dziye.

(they are tired - now - oxen - those =
 Those oxen are now tired.)

- (58) a. Vana' vadiki havaéndé kubira.

(children - little - do not go - to bira =
 Little children do not go to the bira.)

- b. Havaéndé kubira vana' vadiki.

(they do not go - to the bira - children - little
 = Little children do not go to the bira.)

There seems, nevertheless, to be a difference between the kuti clauses and the other noun phrases like mombe dziye in (57) and vana vadiki in (58) with respect to postpositioning. Whereas in the latter case postposing of the subject noun phrase occurs only after the gender copying rule has applied, this is not so with kuti clauses, since the kuti by itself has not the feature $\langle \overline{F} \text{ class} \rangle$ which would make it possible for the gender copying rule to apply. In their surface structure (55b) and (56c) resemble (57b) and (58b) in respect of subject postpositioning. But it has already been pointed out that in some cases kuti clauses are under the domination of NP as in (40); whereas in others they are not, as in (50) - (52). It is also observed that the kuti clauses which are dominated by NP take the concord zvi when the gender copying rule is applied with them as subject as in (55a) and (56b). The question which immediately suggests itself is, how do some of the kuti clauses come to control the concord zvi, while others^{do}_^ not?

If it is maintained that NP may be expanded only into S, (an approach which however has been proved already to result in a very weak grammar) in, say, the string kuti údzokére kumushá in (55), then it is admitted that we have a situation in which an S dictates and controls the concord zvi with the gender copying rule. What is curious in this case is that the element which signifies the class feature zvi is absent or, shall we say, is not overtly expressed. Elsewhere in the language noun phrases which take the concord zvi usually have themselves a zvi (or one of its allomorphs) which is overtly expressed as in the sentences in (59).

(59)a. Zvipunu zviye zvataika.

(spoons - those - got lost =

Those spoons got lost.)

b. Ndanzwa zvinhu zvinonakidza.

(I heard things which were interesting.)

A notable exception, however, to this is a situation in which there is a combination of noun phrases which refer to non-human beings and which are in a subject or object position. Such a combination requires this zvi for concordial agreement as illustrated in the sentences below.

(60)a. Mombe (10) nemadhongi (6) zvinofura pamwe chete.

(cattle - and donkeys - graze - together =

Cattle and donkeys graze together.)

b. Bhúku rákó (5) népeni yákó (9) ndazv^íisa patáfura.

(book - your - and pen - your - I put them - on table =

As for your book and ~~xxx~~ your pen, I have put them on the table.)

A stronger argument is however the following: the kuti clause has a sentential base as has already been pointed out. The kuti clause itself is derived by applying to the underlying S some transformational rules. The result so obtained may be a kuti clause of the type in (40) which is dominated by NP, or in (50) which is dominated directly by VP. What we have here then is a strange situation where actually one and the same kuti clause is a noun phrase in one case and is not a noun phrase in another as the following sentences illustrate.

(61)a. Ndinoda' kúti áúyé.

(I want - that - he come = I want him to come.)

b. Ndinozvída' kúti áúyé.

(I want it - that - he come = I want it that he should come.)

(62)a. Deni' anofanírá kúti áúyé.

(Deni - ought - that - he come = Deni ought to come.)

b. *Deni' anozvifanírá kúti áúyé.

(*Deni - ought it - that - he come.)

The grammaticality of (61b) shows that the underlying structure of (61a) meets the structural description for object anaphora, hence the claim that the string kuti áúyé is dominated by NP. Sentence (62b) indicates

that this transformation blocks, and hence its ungrammaticality and the fact that kuti auyé is outside the domination of NP.

It has already been said as well as demonstrated that the sentences in (53) and (55), for instance, contain embedded sentences. That this is so can be illustrated further by listing the two sentences which underlie each one of them. This can be seen in (63) and (64) respectively.

(63)a. Mwoyo ánozvizíva.

(Mwoyo knows it.)

b. Kóndo' ákabá mari'.

(Kondo stole some money.)

(64)a. Zvinonetsa.

(It is difficult.)

b. Unódzokera kumusha'.

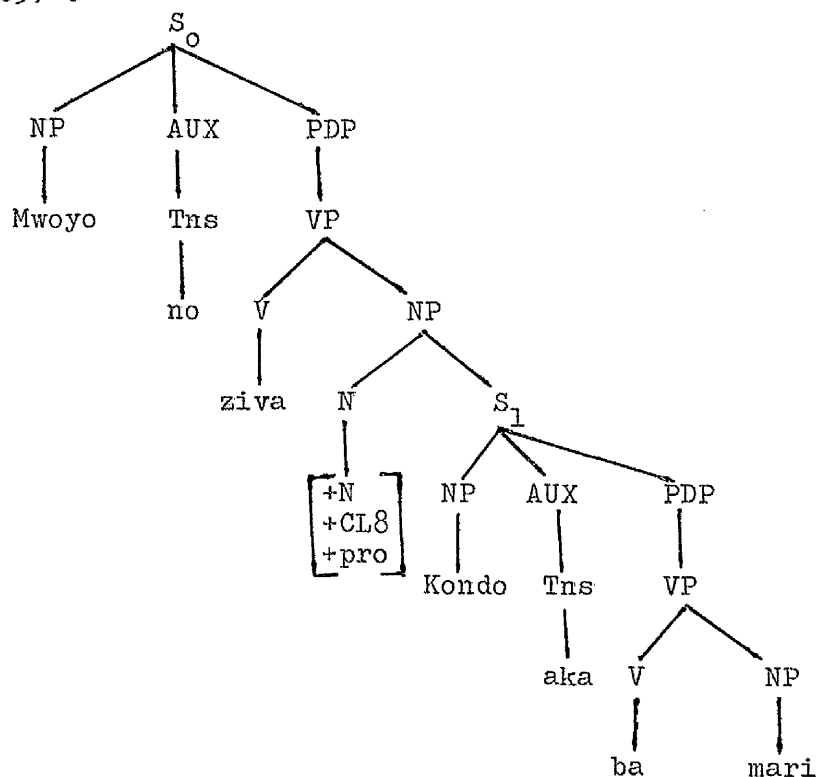
(You will go back home.)

(It should be noted however that the pairs of sentences in (63) and (64) are only approximate representations of the sentences which underlie (53) and (55) respectively.)

It is observed that in these embedded sentences nowhere is there any constraint on the noun phrases which they may contain. Furthermore we see that the element zvi is present only in the higher or matrix sentence in both cases. But these zvi concords, as we may call them, are clearly reflexes of some noun in class 8, and among the noun classes in Shona it is only class 8 which requires zvi as a concord. Therefore, in order to account for the presence of these zvi concords or agreements it is proposed here to postulate a noun of class 8 to be the head noun of such noun phrases as occur in the direct object position in (53) and in the subject position in (55). It should be borne in mind nevertheless that nowhere in these noun phrases with complement sentences do we ever get an actual noun of class 8 in the surface structure.

The structure which underlies (53) may therefore be represented by the tree diagram in (65a) below. (Details which are not crucial to the present discussion are omitted in this branching tree. This will also be the case in respect of the tree diagrams which will occur in the rest of this study.)

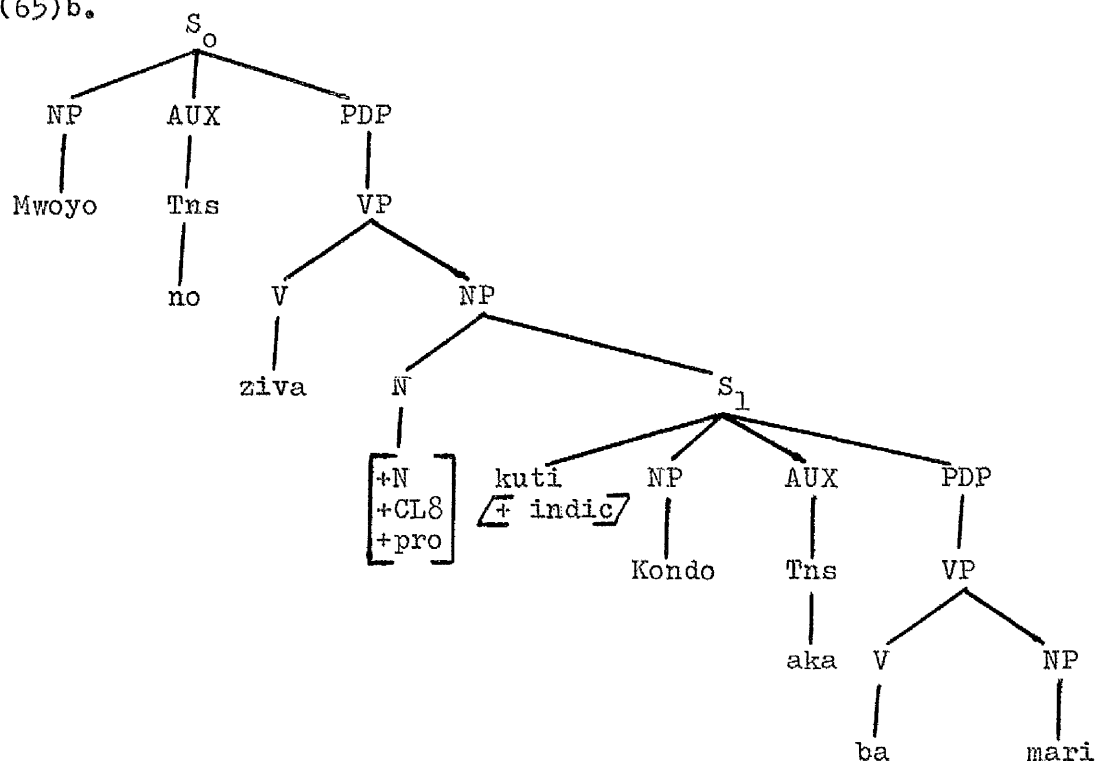
(65)a.



After complementizer placement has applied we then get the structure in (65b)⁶.

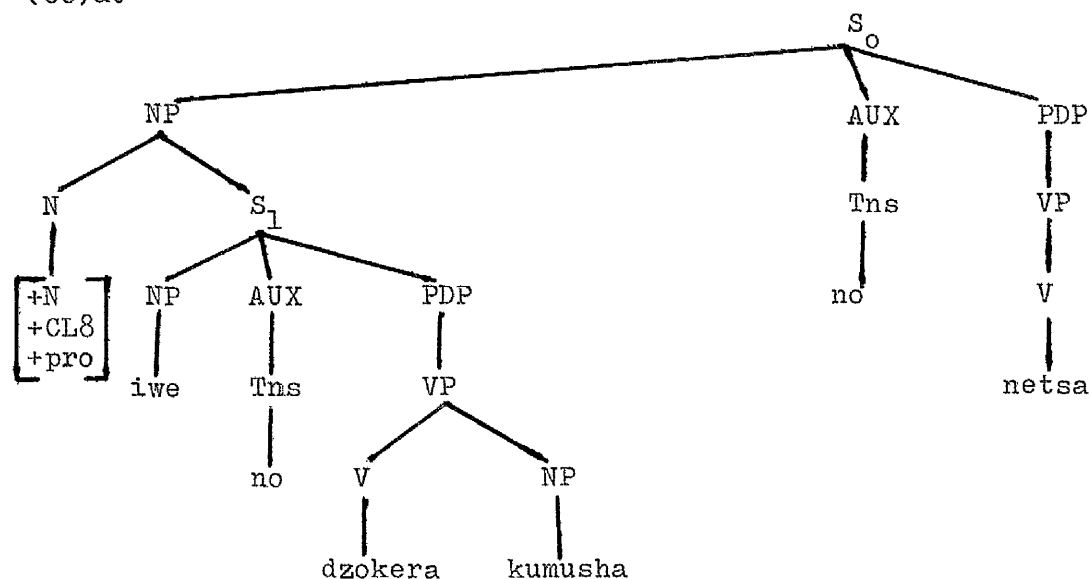
6. In this chapter complementizers are regarded as being introduced transformationally. The consequences of this approach are discussed in Chapter Four.

(65)b.

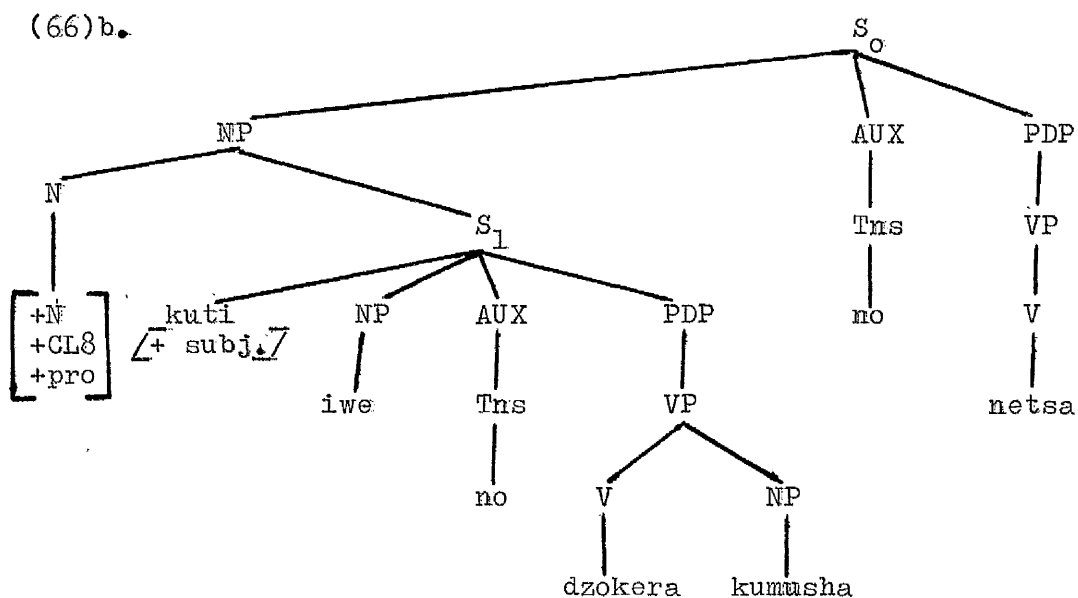


The structure which underlies (55) will have the representation in (66a).

(66)a.



As before, after complementizer placement has applied the structure in (66b) results.



Iwe is a second person singular pronoun which in (55) is deleted. However, its deletion is optional; sentence (67) in which it is not deleted is perfectly well-formed.

(67) Kuti iwe' u'dzokere kumusha' zvinonetsa.

(For you to go back home is difficult.)

1.3 The Case For Verb Phrase Complements

In the account which follows it is intended to deal with the complement sentences which are not covered by the expansion of NP into N + S. In this connection consider the following sets of sentences:

(68)a. Toni' anoda' kuti aende' kumusha'.

(Toni - wants - that - he go - to home =

Toni wants to go home.)

b. Kuti aende' kumusha' ndizvo zvaanoda' Toni'.

(that - he go - to home - it is it - that he wants - Toni =

That he goes home is what Toni wants.)

c. Kuti aende' kumusha' ndizvo zvinodiwa' naToni'.

(that - he go - to home - it is it - that is wanted - by

Toni = That he should go home is what is wanted by Toni.)

d. Toni' ánodá chii? (reply: kuti áendé kúrushá)

(Toni wants what? (reply: that he should go home))

e. Toni' ánozvídá. (referring to kuti áendé kúrushá)

(Toni wants it. (namely, that he should go home))

(69)a. Toni' ánofánirá kúti áúyé.

(Toni- ought - that - he come = Toni ought to come.)

b. *Kuti áúyé Toni' ndízvo zvaánofánirá.

c. *Kuti áúyé ndízvo zvinofánirwá naToni.

d. *Toni' ánofánirá chii? (reply: kuti áúyé)

e. *Toni' ánozvífánirá. (referring to kuti áúyé)

(70)a. Ndege yákáramba ichíbhurúruka.

(aeroplane - kept on - while it is flying =

The aeroplane kept on flying.)

b. *Ichíbhurúruka ndége ndízvo zvayákáramba.

c. *Ichíbhurúruka ndízvo zvakárambwa néndege.

d. *Ndege yákáramba chii? (reply: ichíbhurúruka)

e. *Ndege yákazvirámba. (referring to ichíbhurúruka)

The complement clause kuti áendé kúrushá in (68) exhibits the same properties as noun phrases. For instance, it can be focussed in a pseudo-cleft sentence as in (68b); it can appear as subject in a passive sentence as in (68c); it can be replaced by the interrogative pro-form chii as in (68d); and it can undergo object anaphora as in (68e). These properties are not observed with the complement sentences kuti áúyé in (69) and ichíbhurúruka in (70).

Although the complement clauses in (68) and (69) differ in respect of their grammatical function, their derivation is similar. That is, their derivational histories share the same set of transformational rules as was pointed out on p.37. The situation which we have here is that, although (69) differs from either (68) or (70) in some respects, it also resembles both of them in other respects. The trans-

formational rules which are required to generate ichibhururuka in (70) differ considerably from those which are required in order to obtain kuti auyé in (69).

According to the way in which transformational theory is currently formulated there are a number of ways of characterizing these three sentences. One way is to regard the three complement clauses in (68), (69) and (70) all as instances of an S which is under the domination of NP, but differing in the way the transformational rules which apply to this S are specified. For example, we could say that when the verbs -fanírá (ought) and -ramba (keep on) are followed by an NP, that NP does not pass the tests for object noun phrases. There would have to be yet another restriction with the verb -ramba which prevents the insertion of kuti before its S complement. All these restrictions make this particular approach needlessly complicated, and in any case there seems to be very little, if any, advantage to be gained by adopting it.

Another way is to treat the complement clauses in (68) and (69) together and (70) by itself. That the complement clauses in (68) and (70) show more differences than similarities seems to be obvious enough not to require discussion. The differences between the complement clauses of the type in (68) and (69) were discussed at some length on p.30ff, and it was concluded there that our grammar becomes much simpler and achieves a larger measure of descriptive adequacy if we treat them separately.

The third alternative postulates that the complement clauses in (69) and (70) are not instances of noun phrase complementation, but rather that they are under the direct domination of VP. Our two verbs -fanírá and -ramba, instead of being marked with restrictions which make the tests for object noun phrases fail, will be strictly subcategorized in a way which allows them to occur directly before S, and -da before NP. With this approach the ungrammaticality of some of the sent-

ences in (69) and (70) is automatically accounted for, because the tests for object noun phrases will only be relevant in the case of an S that is under the domination of NP.

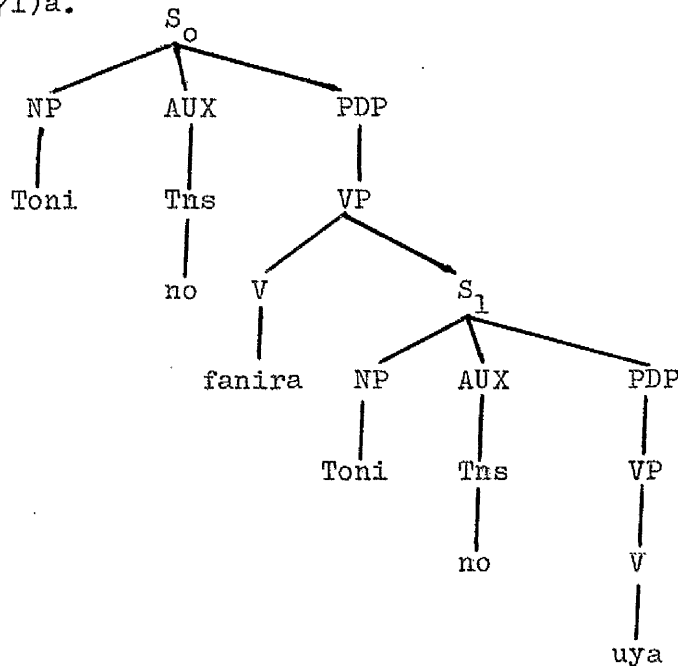
The first and second alternatives are less acceptable as viable hypotheses. For one thing, both approaches require a strict subcategorization statement which is needlessly complex. For another, they require restrictions on the transformations which are permitted. Needless to say, a statement of these restrictions would be very cumbersome in some cases. So it is the third alternative which is adopted for the present.

The phrase structure rules which are required for verb phrase complementation are the same as in (49) above except that

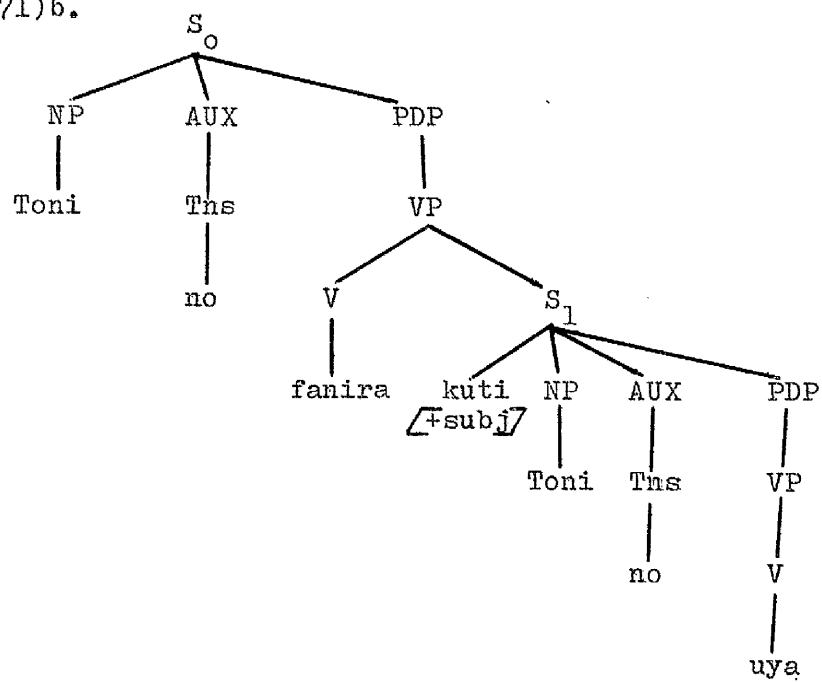
VP \longrightarrow V(S).

The structures which underlie the sentences in (69) and (70) may accordingly be represented by the tree diagrams in (71) and (72) respectively. The trees in (71a) and (72a) represent the deep structures of these sentences, while (71b) and (72b) are intermediate structures after complementizer placement has applied.

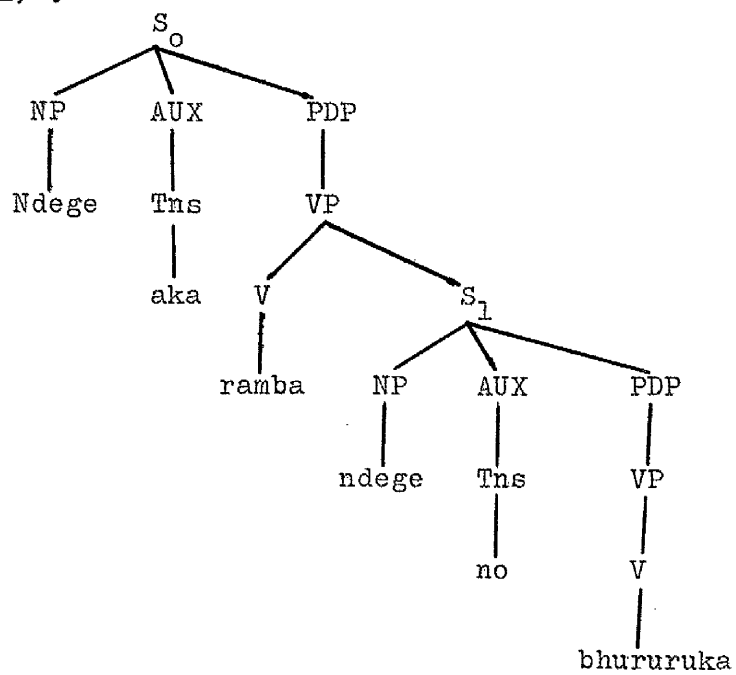
(71)a.

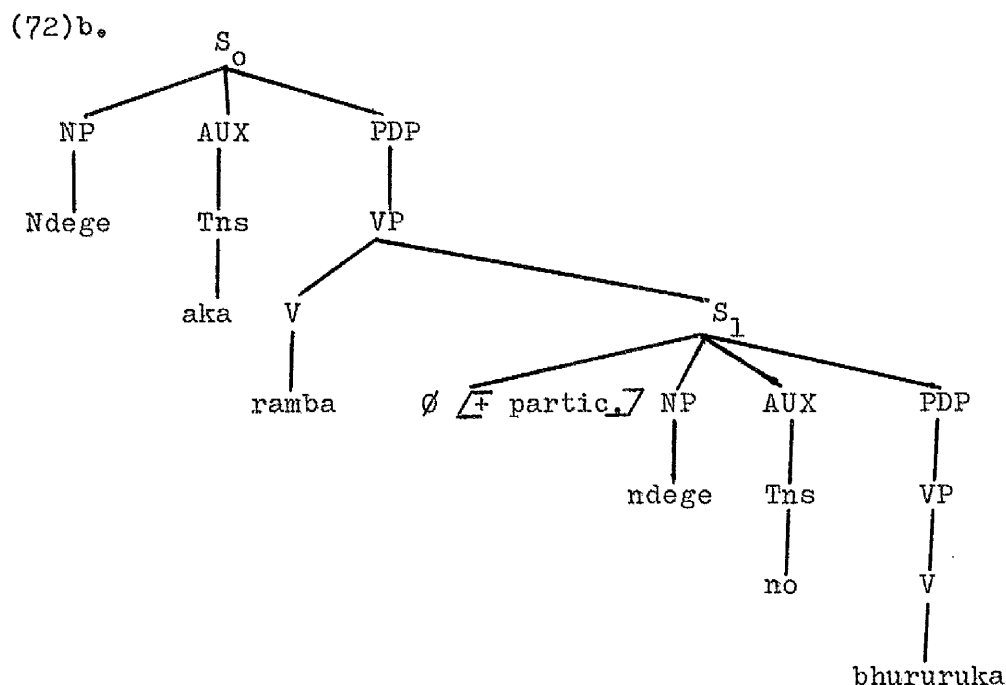


(71)b.



(72)a.





1.4 Sentential Complements and Selectional Restrictions

That not every verb can occur with any noun phrase, either in subject or in object position, in a sentence has been so often remarked in linguistic literature that a detailed discussion in this connection is superfluous. The noun phrases have to obey the selectional restrictions that are imposed by the verbs. These selectional restrictions equally apply to sentence complements which are dominated by NP. (For a detailed discussion on selectional restrictions between verbs and noun phrases, see Chomsky, 1965a.) These selectional restrictions form in a way part of the meaning of a verb. As an example, consider the verb -nwa' (drink). This verb takes as direct object a concrete noun phrase. If in the course of time it changed so that it could take as its direct object an abstract noun phrase, like rudo' (love), it would no longer express the meaning which it has now. According to the meaning which -nwa' expresses now, (73a) is well-formed but not (73b).

(73)a. Vaná' vānonwá' mūkaka.

(Children drink milk.)

b. *Vaná' vānonwá' rudo'.

(*Children drink love.)

Verbs which take direct object noun phrases will be marked as occurring in the environment ____NP, that is, they occur before an NP. If this environment is absent in the strict subcategorization statement of a given verb, that particular verb may not be followed by a direct object noun phrase. Besides, every verb will normally occur in the environment NP _____. That is, every verb must have a subject noun phrase in a sentence as is indicated by (49a) above. We need not mark the environment NP _____ since there are no exceptions to it. However, in both the cases where the NP is in a direct object position and where it is in a subject position it is necessary to specify what features the NP may contain. As an illustration consider the sentences in (74).

(74)a. Hóvé dzínofema.

(Fish breathe.)

b. Mudzimái ákapóná mwaná wáké musíkaná.

(woman - bore - a child - her - a girl =

A woman gave birth to a baby girl.)

c. Nyayá yákóna.

(The plan has failed.)

d. Vanhu vazhínjí vānotendera makuhwa.

(Many people believe gossip.)

The selectional restrictions of the verbs in these four sentences in respect of the selection of the subject NP and the object NP can be represented in the following manner:

(75)a.

-fema	
+ V	
+ \angle animate	
:	
:	
:	
+ Fn	

c.

-kona	
+ V	
+ \angle abstract	
:	
:	
:	
+ Fn	

b.

-póná
+ V
+ $\angle \mp$ human \angle _____
+ _____ NP
+ _____ + $\angle \mp$ human \angle
:
:
:
+ Fn

d.

-tendera
+ V
+ $\angle \mp$ human \angle _____
+ _____ NP
+ _____ + $\angle \mp$ abstract \angle
:
:
:
+ Fn

The symbol $\angle \mp$ Fn \angle simply stands for the other features, syntactic or semantic, which may need to be specified. Notice that this is only a partial specification of the features of these verbs. Those features which are not relevant to the present discussion have been omitted.

In (74c) and (74d) we have verbs which must take, respectively, an abstract noun phrase as subject and an abstract noun phrase as direct object. With these abstract noun phrases there are only two possibilities in regard to their structure. The head noun of such a phrase may be a noun which signifies an abstract idea like the following noun: makuhwa (gossip), mafámbíró (a manner of walking or travelling), háshá (anger), rudó (love), ruvéngó (hatred), urombo (poverty). The other possibility is that the NP may have an embedded complement clause. In the latter case the head noun in Shona is not realized in the form of a noun as such in surface structure as has already been pointed out. Hence the following two sentences in (76) as well as those in (74c) and (74d) are possible.

(76)a. Kuti Toni' átízé zvákóna.

(that - Toni - he run away - it has failed =

For Toni to run away it has become impossible.)

b. Vanhu vazhínjǐ vánótendera kuti kúna Mwari'.

(people - many - they believe - that - there is - God =

Many people believe that there is God.)

But neither of the following sentences which contain respectively the verbs -kona and -tendera, and where the subject noun phrase and the object noun phrase respectively are not abstract, is possible.

(77)a. *Mvúrá yá'kóna.

(*The water/rain has failed.)

b. *Vanhu vazhínjǐ vǎnotendera zvigaro.

(*Many people believe chairs.)

Although, as was stated above, there are no identity constraints on the noun phrase in the complement sentences, there are nonetheless restrictions on the nature of the verb of the higher S. Thus, while the sentences in (78) are all grammatical, those in (79) with the same superficial structure as the corresponding sentence in (78) are not because of the nature of the verbs in the higher sentences. The complement clauses are underlined in the sentences below.

(78)a. Kuti úóné chíva chichífamba zvínoshura.

(that - you see - a puff-adder - it moving - it is ominous =

For you to see a puff-adder moving is an ill omen.)

b. VǎNzungú vǎkáramba kuti mwana wávo áróorwé naMberi.

is

(Mr.Nzungu - refused - that - child - his - she married -

by Mberi = Mr.Nzungu refused to allow his daughter to marry Mberi.)

c. Amái vǎbvúnza kana Farái ákauya.

(Mother asked whether Farai came.)

d. Midzi áti, "Ndinóuya mangwana."

(Midzi said, "I will come tomorrow.")

(79)a. *Kuti úóné chíva chichífamba zvínorára.

(*For you to see a puff-adder in motion sleeps.)

b. *VǎNzungú vǎkabika kuti mwana wávo áróorwé naMberi.

(*Mr.Nzungu cooked that his daughter might marry Mberi.)

c. *Amái vǎdya kana Farái ákauya.

(*Mother ate whether Farai came.)

d. *Midzi átaúra, "Ndinouya mangwana."

(*Midzi spoke, "I will come tomorrow.")

The verb must be one that can take an abstract noun phrase as either subject (for verbs which behave like -shura (serve as ill omen), -finhá (get bored), -dzimaídza (confuse), -era (be sacred, taboo), -fúmurá (put to shame), -ipa (be bad), -naka (be good) and many others) or object (for verbs which behave like -bvunza (ask), -bvuma (agree), -yeuka (remember), -da (want, need), -ti (say), -edza (try), -femberá (guess) and many others).

What has been established in this chapter is that some complement clauses function as noun phrases, hence such complement clauses are said to be dominated by NP. As noun phrases they may appear in subject or object position. The complement clauses which do not function as noun phrases are directly dominated by VP. The complement clause (clauses) which may occur in any one sentence is governed by the verb in the higher sentence.

In this chapter I shall give a tentative scheme of the complementizers which are found in Shona. I say tentative because the issue is far from being settled. What seems to be clear however is that there is need to set up a grammatical category of complementizers. This chapter will be devoted to arguing the case for complementizers.

2.1 Kuti [+ indicative] and Kuti [+ subjunctive]

Let us examine the underlined complement clauses in (40a) and (78b) in Chapter One which are repeated here as (1) and (2) for ease of reference.

(1) Mwoyo ánozi^ává kuti Kondo^á ákaba^á mari^á.

(2) VaNzungu^á vakára^ámba kuti mwana^á wavo^á aro^áorwe^á naMberi^á.

We notice that the formative which is performing the function of subordinating the constituent clause to the matrix sentence is kuti. Nevertheless, kuti in (1) is followed by a clause in the indicative mood, while kuti in (2) is followed by a clause in the subjunctive mood. This difference in the mood of the clause which follows kuti is dependent to some extent on the verb in the containing S. As will be seen later the mood of the constituent clause forms part of the subcategorizational statement of the verb in the higher S. The two sentences given above provide us with two distinct complementizers, namely, (a) kuti [+ indicative] and (b) kuti [+ subjunctive]. Further examples of sentences in which the constituent clauses are introduced by these two complementizers are given below.

Examples with kuti [+ indicative]

(3) Kuti Ni^áxon ákányé^ápa zvákasvótá^á vánhu vekú^áAméri^áca.

(that - Nixon - lied - it angered - people - of at America =
That Nixon told a lie angered the Americans.)

(4) Kuti murú^ámé némukád^ází vānombotúkáná^á zvinozívikanwa^á.

(that - a man - and a woman - sometimes quarrel - it is known =
That a man and his wife sometimes quarrel is known.)

- (5) Ndinófunga kuti zvinhu zvichánaka munyika muno.

(I - think - that - things - will be all right - in country -
this = I think that the situation will improve in this country.)

- (6) Podzorimwa ábvuma kuti akatadzá.

(Podzorimwa admitted that he made a mistake.)

Examples with kuti [+subjunctive]

- (7) Kuti ambúya vanwe tii isina mukaka zvava kuraamba.

(for - grandmother - she drink - tea - it not having - milk -
it is now - refusing = For grandmother to take tea without
milk is now difficult.)

- (8) Kuti muroora aende kunoona amai vake zvakarurama.

(for - daughter-in-law - she go - to see - mother - her - it
is all right = For the daughter-in-law to go and see her mother
is in order.)

- (9) Vakomana avo varangana kuti vatize.

(boys - those - planned - that - they run away = Those boys
have planned to run away.)

2.2 Kuti [+infinitive]

On p.38 it was postulated that the head noun of noun phrases with complement clauses is $\begin{bmatrix} +N \\ +CL8 \\ +pro \end{bmatrix}$ and this works very well with the

complement clauses which we have seen so far and which are under the domination of NP. Nonetheless not all complement clauses have $\begin{bmatrix} +N \\ +CL8 \\ +pro \end{bmatrix}$ as their head noun. With some complement clauses there is need, it seems, to postulate something like $\begin{bmatrix} +N \\ +CL15 \\ +pro \end{bmatrix}$ as the head noun. An example of

this is the complement clause in (10) below.

- (10) Vana vadiki vanoda kutamba bhora.

(Little children like to play football.)

To illustrate that there is need to postulate something other than

$\begin{bmatrix} +N \\ +CL8 \\ +pro \end{bmatrix}$

for the head noun of the complement clause in (10) consider the application to it of the following transformations in (11):

- (11)a. pseudo-cleft transformation;

Kutám^á bhó^á ndí^{ko} kwavánodá^á vaná^á vadí^{ki}.

(to play - football - it is it - which they like - children -
little = Playing football is what little children like.)

- b. passive transformation;

Kutám^á bhó^á kúnodi^{wá} né^{vaná} vadí^{ki}.

(to play - football - it is liked - by children - little =
Playing football is liked by little children.)

- c. object anaphora transformation;

Kutám^á bhó^á vaná^á vadí^{ki} vánokú^{dá}.

(to play - football - children - little - they like it =
As for playing football & little children like it.)

What these transformations tell us is that the string kutám^á bhó^á is functioning as a direct object noun phrase. But clearly this noun phrase contains a verb phrase, namely, -tám^á bhó^á. This suggests that the noun phrase has a complement clause embedded in it. That the string -tám^á bhó^á is part of an embedded sentence is illustrated by the following transformations in (12).

- (12)a. Bhó^á rínodá^á kutám^{bwá} né^{vaná} vadí^{ki}.

(football - wants - to be played - by children - little =
It is small children who should play football.)

- b. Vaná^á vadí^{ki} vánodá^á kúritám^{bá}.

(Small children like to play it.)

- c. Vaná^á vadí^{ki} bhó^á ndí^{ro} ravánodá^á kutám^{bá}.

(children - little - football - it is it - which they like-
to play = As for small children football is the game
which they like to play.)

In (12a) the complement clause has undergone passivization, in (12b) it has undergone object anaphora, and in (12c) it has undergone pseudo-cleaving. These transformations apply within a simplex sentence.

Now notice that the concordial agreements which are controlled by the string kutám^á bhó^á in (11a) through (11c) are quite different

from those which we saw controlled by kuti Kondo ákabá mari in (40b) in Chapter One. Whereas the complement clause in (40b) has the concordial agreement zvi, that in (10) has ku. The former is an affix of class 8, while the latter is an affix of class 15. It is worth noting also that the complement clauses which are dominated by NP in Shona control normally either class 8 or class 15 agreements. There are nevertheless instances of complement clauses which, though in subject position, do not control either class 8 or 15 concordial agreements, at least in surface structure. Such are the complement clauses in the sentences below.

(13) Kuti Jojo ákabirwa mari' hachisi chokwadi.

(That George had his money stolen is not true.)

(14) Kuti murume anyatsogara nevakadzi vaviri haisi nyore.

(For a man to live peacefully with two wives is not easy.)

(15) Kuti mwana ásvike makore maviri asati afamba hachimbori chinhu chinotyisa.

(For a child to go for two years before it walks is not something to worry about.)

Notice that in these sentences the subject concord is controlled, not by the subject of the sentence as one would expect, but by the complement noun phrase which is underlined. This is a feature which is characteristic of the verb "to be" in Shona.

It is also possible however for the subject complement clause in (13) - (15) to control the subject prefix in the usual manner as is illustrated in (16) - (18) respectively.

(16) Kuti Jojo ákabirwa mari hazvisi chokwadi.

(17) Kuti murume anyatsogara nevakadzi vaviri hazvisi nyore.

(18) Kuti mwana ásvike makore maviri asati afamba hazvimbori chinhu chinotyisa.

The connotative difference between the sentences in (13) - (15) on the one hand and those in (16) - (18) on the other seems to be that attention is focussed on the complement noun phrase in the former sentences, and on the subject NP in the latter sentences. Notice that (18) may

alternatively occur as (19) below but with the same semantic reading.

- (19) Kuti mwana' asvike' makore' maviri' asati' afamba hazvimbori'
zvinhu zvinotyisa'.

The change from the singular chinhu chinotyisa' to the plural form zvinhu zvinotyisa' is only ~~in~~ form, not in meaning. In this case it is not clear whether the subject concord is controlled by the subject complement clause or by the complement noun phrase zvinhu zvinotyisa'.

The generation of (13) - (15) presents a difficulty which however is more apparent than real. Given the gender copying rule (see 5.7) the sentences in (16) - (18) are easily derived. That is, there is no problem ~~in~~ describing them. But in (13) - (15) there is need to describe how the complement, and not the subject, comes to control the subject prefix. Notice (a) that the control by the verb complement of the subject prefix is optional in these sentences and (b) that this phenomenon occurs in a structure of the type

$$NP_1 - V - NP_2$$

where V is the verb "to be". This apparent discrepancy can be obviated by setting up another rule of gender copying which is optional and which applies, not from left to right, but from right to left. This rule will apply just in case the verb is "to be".

Control of a subject prefix by a complement clause is not restricted to sentences with subjects which consist of embedded clauses only as is illustrated below.

- (20) Gadheni rangu haisi kirechi'.

(My garden is not a creche.)

- (21) Mombe hachimbori' chinhu chekutamba nacho'.

(Cattle are not things to play with.)

Compare (20) - (21) with (22) - (23) in which the subject controls the subject concord. The meaning remains the same.

- (22) Gadheni rangu harisi kirechi'.

- (23) Mombe hadzimbori' zvinhu zvekutamba nazvo'.

Further examples of sentences in which the complement clauses in subject

position do not seem to control either class 8 or class 15 concords are:

(24) Kuti J^éso ákatí^ífí^ír^íá íchokwadi^í.

(That Jesus died for us is true.)

(25) Kuti ungáz^ívidziirire^í n^émazwí aká^ídaró kú^ítamba zv^íakó.

(that - you can defend yourself - with words - like that -
it is playing - yours = To think that you can defend yourself
with those words is child's play.)

(26) Kuti ha^íasiriye aká^íba mari^í ínhema^í.

((The denial) that he is not the one who stole the money is
false.)

In a very few cases complement clauses may also control class 16 concords. These will be discussed in 6.1.5.

Apart from showing that the head noun of a complement clause under the domination of NP need not always be a pronoun of class 8, the complement clause in (10) appears to offer us another complementizer, namely, ku. This ku is followed always by a verb in the infinitive mood. But since the complement clause kutám^íbá bhó^íra controls ku agreements, one might ask whether these ku agreements in (11) are not merely reflexes of the ku in kutám^íbá. In other words, is ku not a noun class concord like zwi in zvipú^ínu in (59a) in Chapter One? In that case the string kutám^íbá bhó^íra would be regarded as something like a derived nominal. However, the sentences in (12) above do not support this view. Derived nominals in Shona normally do not undergo the transformations which we see in (12). There will be more discussion concerning derived nominals in the next chapter.

Furthermore, we might want to examine the following sentence :

(27) Peni^í anyátsa kuvhura gónhi^í.

(Peni - did carefully - to open - door =

Peni opened the door carefully.)

We observe that kuvhura gónhi is not a case of noun phrase complementation since the tests for object noun phrases fail here as is shown below in (28).

(28)a. pseudo-cleaving test;

*Pení kuvhura gónhi ndiko kwaanyatsá.

b. passive test;

*Kuvhura gónhi kwanyátswa naPení.

c. interrogative pro-form test;

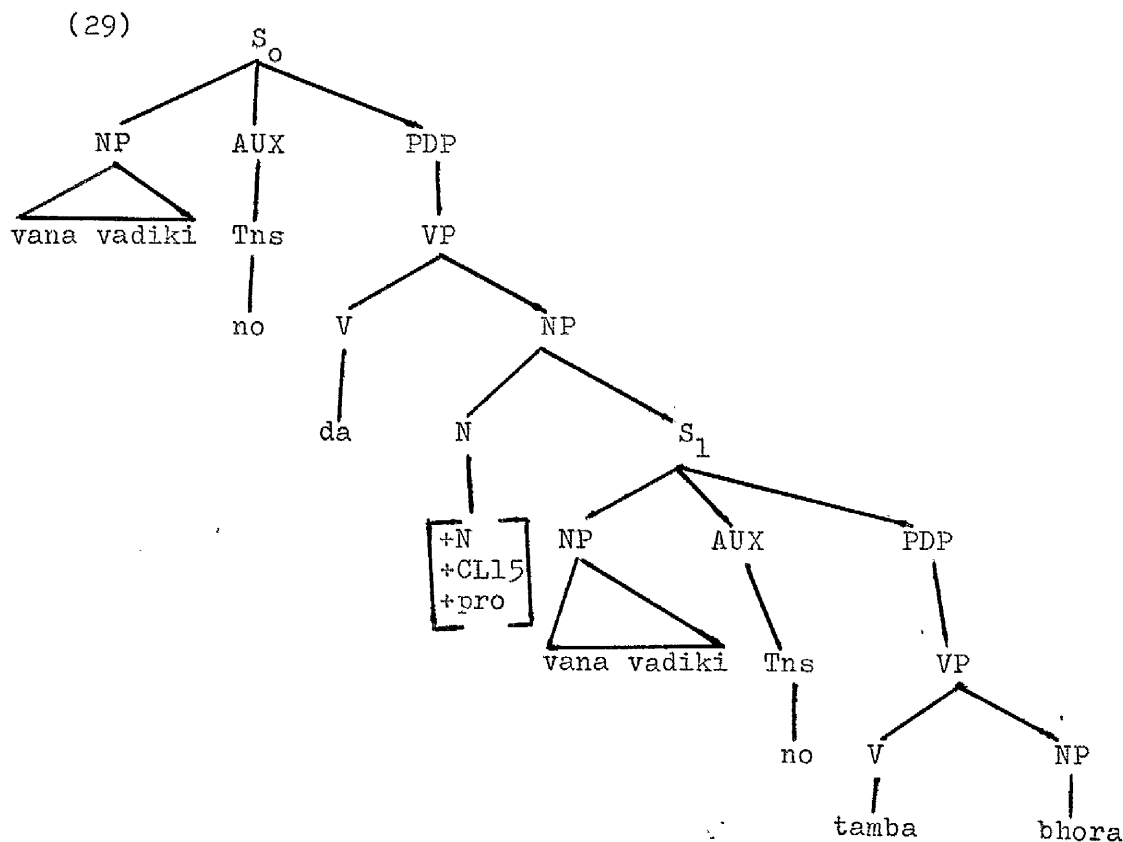
*Pení anyátsa chii? (reply: kuvhura gónhi)

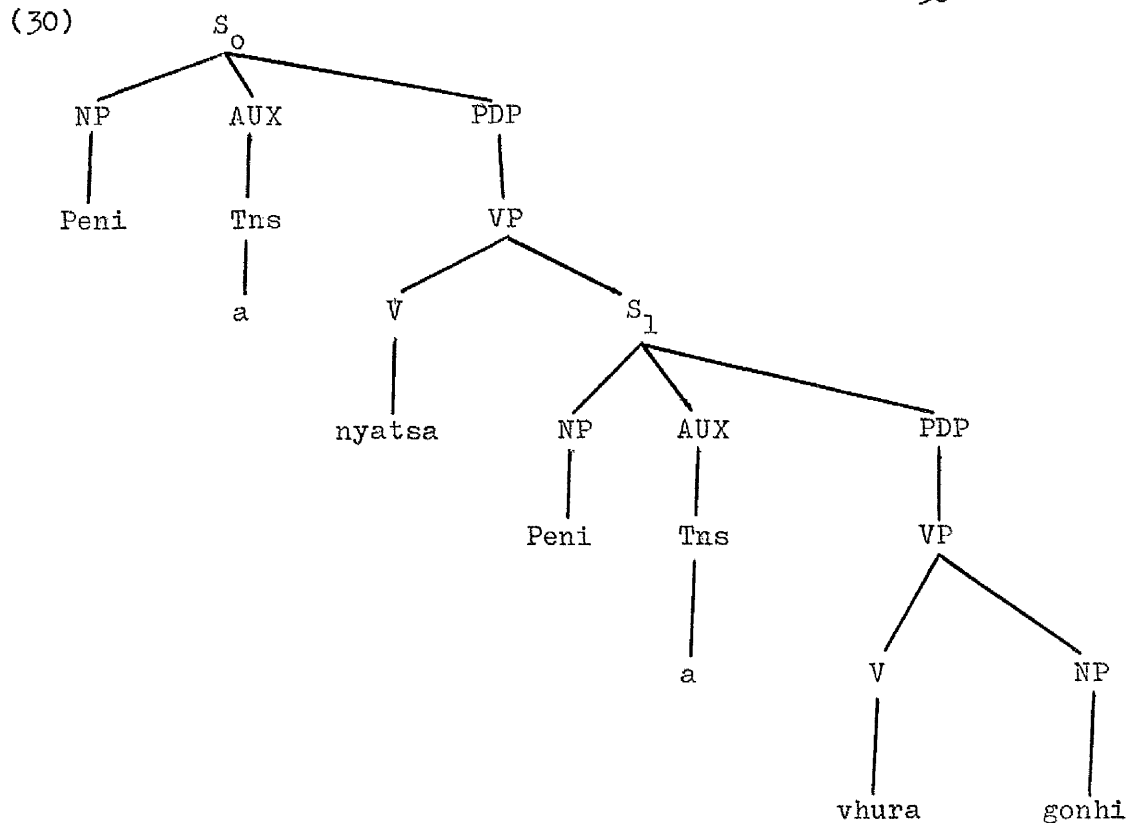
d. object anaphora test;

*Pení ákunyátsa. (referring to kuvhura gónhi)

This is a case of verb phrase complementation (cp. (69a) in Chapter II).

No adverbials between -nyatsa and kuvhura are possible. Although the string kuvhura gónhi is a sentence constituent which is directly dominated by VP in the containing sentence, its own VP consists of a verb accompanied by a direct object noun phrase, namely, gónhi. Notice also how similar in their surface structure (10) and (27) are. The configurations which underlie these two sentences are presented in (29) and (30) respectively.





Apart from lexical items and grammatical formatives these two underlying structures differ only in that in (29) the complement clause is dominated by NP, while in (30) it is dominated by VP. What is nevertheless more important to realize is that the set of transformational rules which map S_1 into kutamba bhóra in (29) seems to be the same as the set of rules that are required to transform S_1 in (30) into kuvhura gonhi. If that is the case, then ku is merely a complementizer in both instances and consequently a pronoun of class 15 has to be postulated in the underlying structure in (29), but not in (30), in order to account for the ku concord agreements we see in (11).

Now, the realization of the class 15 concord shares the same phonological form with the complementizer ku. Just as

+N
+CL8
+pro

 does not receive phonological realization in surface structure when it appears as a head noun of a complement clause as was pointed out on p. 38, so also does

+N
+CL15
+pro

 never get realized phonologically in surface structure

when it appears as a head noun of a complement clause. This view receives further support from a consideration of the sentences in (31).

(31)a. Mako ánodá kufámbá névasíkáná.

(Mark - loves - to walk - with girls = Mark loves to be in the company of girls.)

b. Mako kufámbá névasíkáná ánokúda.

(Mark - to walk - with girls - he loves it = As for moving in the company of girls, Mark loves it.)

c. Mako kufámbá névasíkáná ánozvida.

(Mark - to walk - with girls - he loves it = As for moving in the company of girls, Mark loves it.)

The underlined ku in (31b) is an anaphoric pronoun of the complement clause kufámbá névasíkáná. The element zvi in (31c) is also an anaphoric pronoun of the same complement clause kufámbá névasíkáná. But the sentences in (31b) and (31c) carry the same meaning. Therefore in this case the complement clause may take either ku or zvi agreements. If it is maintained that the ku in kufámbá névasíkáná is the feature which expresses the noun class, we are hard put to it to explain the presence of a zvi agreement in (31c). But if, on the other hand, we say that in its underlying structure kufámbá névasíkáná has a pronoun of class 15 as its head noun in (31b), and a pronoun of class 8 as its head noun in (31c), then this problem will not arise. The implication here is that there is a choice in this case with respect to the head noun of the complement clause. But clearly we have not this choice of head noun with regard to the complement clause in (40b) in Chapter One. There the concord which is controlled by the complement clause is zvi and none other. That being the case there is need to specify when this choice can be exercised and when it cannot. This choice may tentatively be stated in the following manner: when the complement clause is preceded by the complementizer ku the head noun may be a pronoun of either class 8 or class 15, with the latter being more often preferred to the former; but if the complement-

izer is any other than ku, then the head noun is restricted to class 8 only.

2.3 Kuti

For the present I would like to examine more closely the complementizer kuti. It would appear that in some cases the -ti in it is a verb, and moreover a verb which can take a direct object noun phrase. To this end consider the following sentences:

(32)a. Deni' ányátsa kuti Toni' ábvé páno'.

(Deni - did clearly - to tell - Toni - he go away from - here
= Deni told Tony clearly to go away from here.)

b. Toni' ányátsa kunzi naDeni' ábvé páno'.

(Tony - did clearly - to be said - by Deni - he go away from -
here = Tony was told clearly by Deni to go away from here.)

(33)a. Garwe ánodá kúti vanhu vámuíté mámbó.

(Garwe - wants - that - people - they make him - a chief =
Garwe wants the people to make him their chief.)

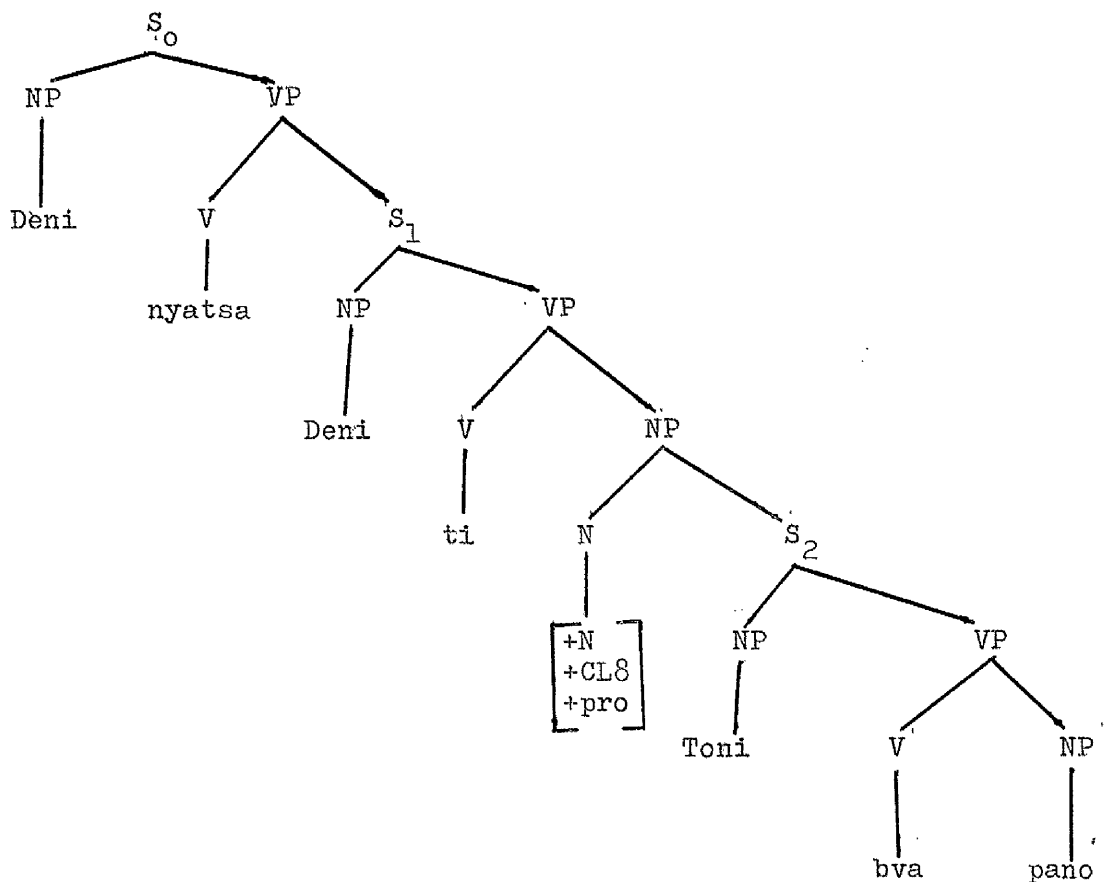
b. Kunzi nevánu áité mámbó Garwe ánozvídá'.

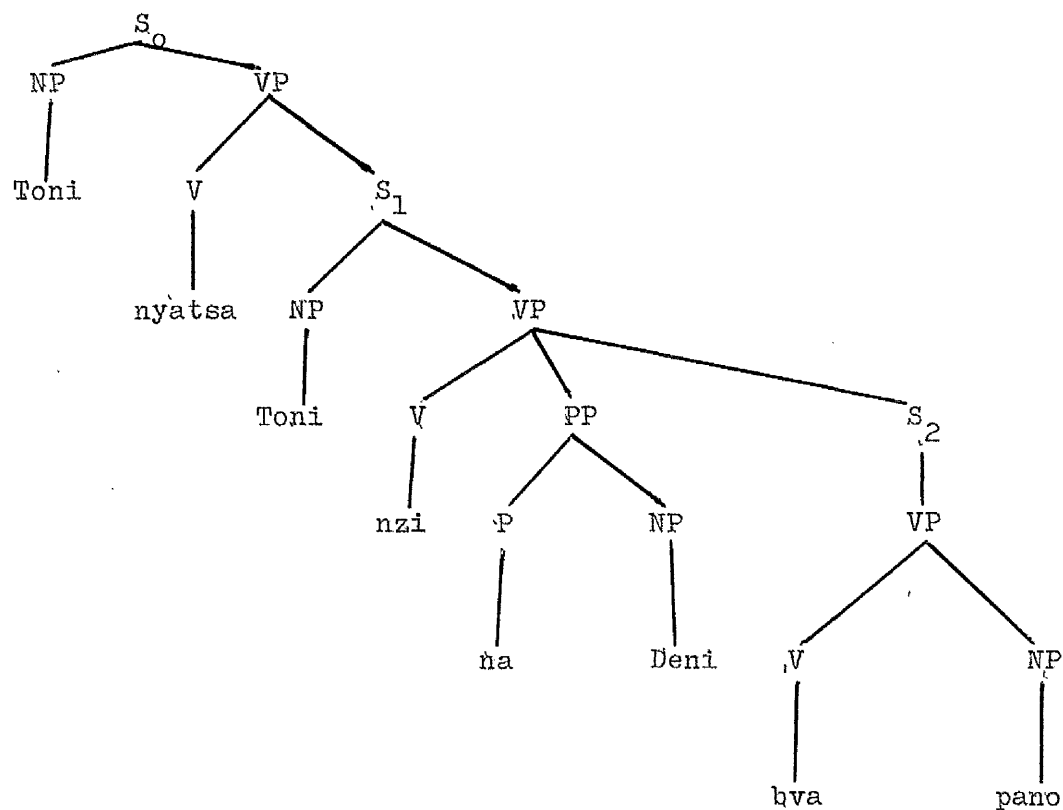
(to be said - by people - he become - a chief - Garwe likes it
= Garwe likes it that the people make him their chief.)

The complement clauses in (32) and (33) are instances of complement clauses under the direct domination of VP and NP respectively. In (32b) and (33b) -ti has been changed to its passive form -nzi. Notice that although (32b) and (33b) contain the passive form of -ti, only (32b) is synonymous with its corresponding active sentence (32a). In both sentences in (32), because -nyatsa does not express an action or a state as verbs normally do, but is rather expressive of adverbiality, it is not a true verb semantically. It is a modal-like verb. This presumably explains why the pair of sentences in (32) are paraphrases. However, structurally these sentences seem not to be related. Although the passive readily applies in S_1 in (32b') the further movement of Toni' to be the subject of S_0 is strictly speaking not part of the passive transformation.

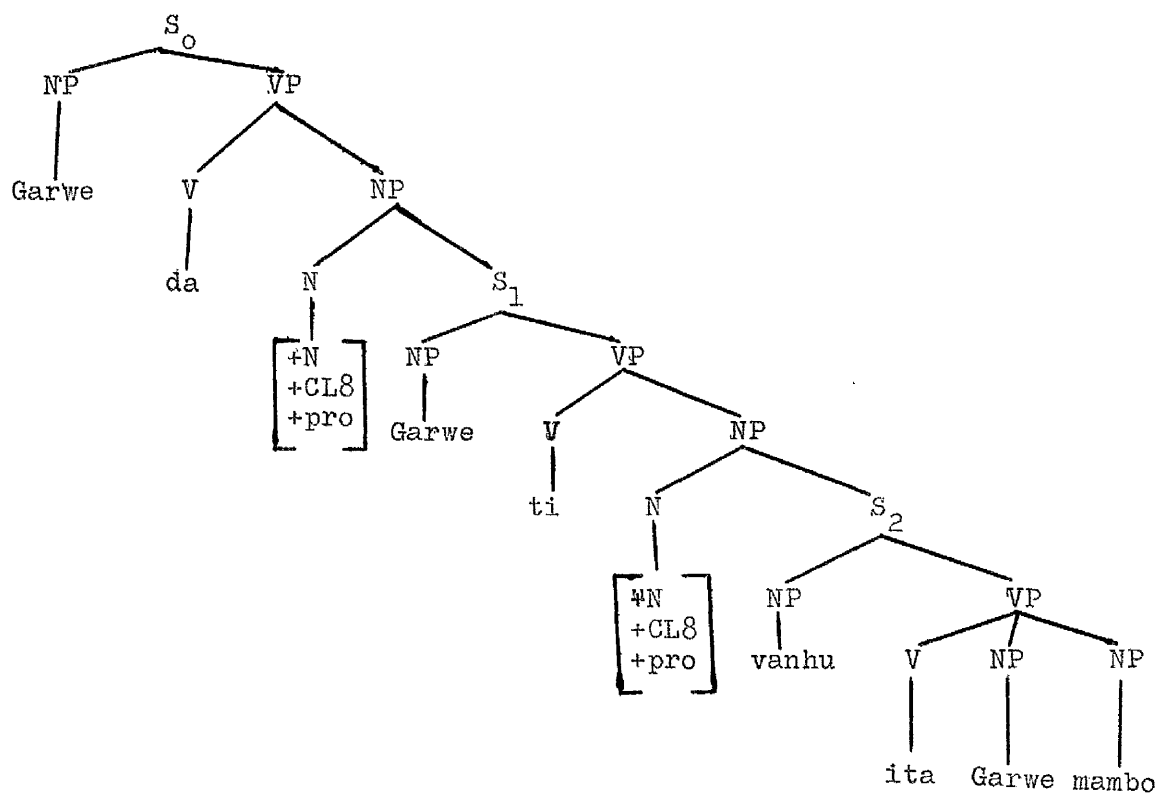
In (33a) the verb of the higher *S* is a true verb -da. In this sentence it is Garwe himself who wants to bring it about that the people make him their chief. But in (33b) Garwe would welcome a move by the people to make him their chief, but he may not have the means to bring this about. To this extent (33a) and (33b) are not synonymous. The point to note however is that in both (32) and (33) -ti is a fully fledged verb and not a complementizer. Hereunder are the tree diagrams which show the structures which underlie the sentences in (32) and (33). These trees help to show the differences between the members of each pair which have been mentioned above.

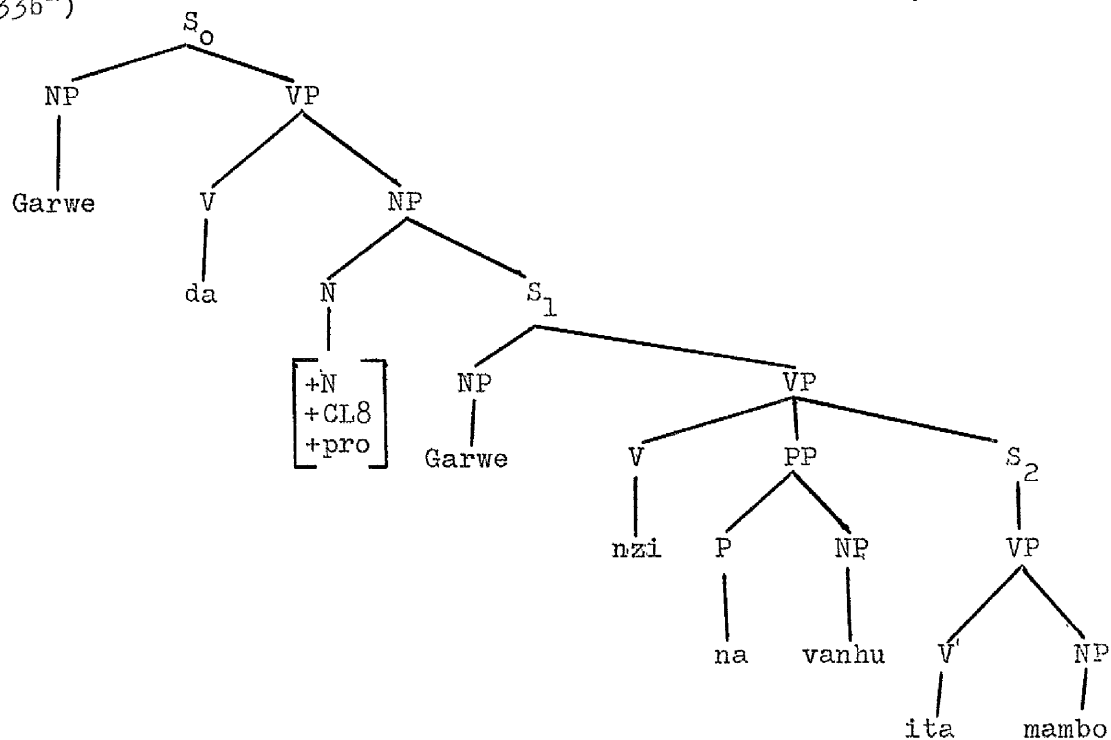
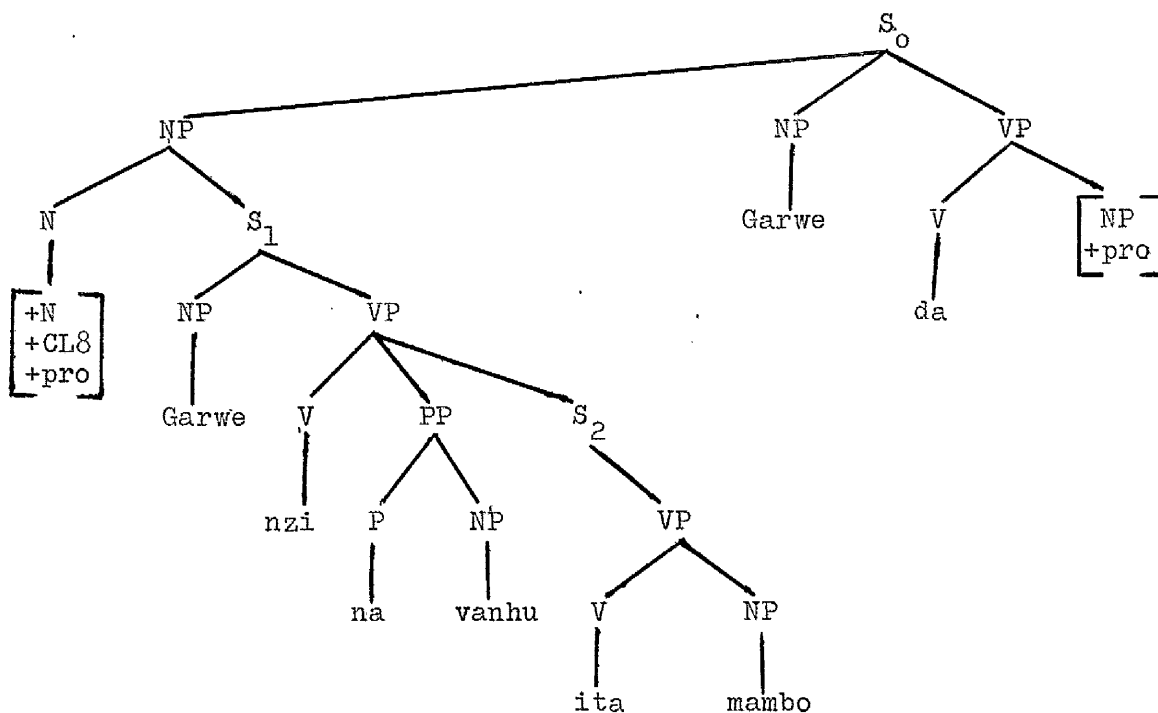
(32a¹)



(32b¹)

In S₁ of (32b¹) first object raising applied to make Toni the direct object of the verb -ti, then the passive rule applied next and ~~lastly~~ lastly the rule of extraposition.

(33a¹)

(33b¹)(33b¹¹)

The transformational rules applying to S_1 in (33b¹) are the same as those which applied to S_1 in (32b¹) above. Then in (33b¹) S_0 undergoes the rule of Object Focussing (see 5.14) which moves the direct object of -da to the left of the subject noun phrase leaving a pro-form in its place as in (33b¹¹). It is from this intermediate structure in (33b¹¹) that the sentence in (33b) is finally derived.

In the case of (32b) we observe that the complement clause kunzi naDeni' ábve páno' continues to be under the direct domination of VP. This is evidenced by the fact that this embedded clause does not control concordial agreement anywhere in the sentence as would be expected of a complement clause which is functioning as a subject. Moreover if we apply the second test for subject noun phrases to (32b) we come up with Toni' as the subject noun phrase of this sentence.

(34) Ndiání anyátsá kunzi naDeni' ábve páno'? (reply: Toni')

(it was who - who did clearly - to be said - by Deni - he go
away from - here = Who was clearly told by Deni to go away
from here?)

We cannot use the second test in such a way as to elicit kunzi naDeni' ábve páno' as the subject noun phrase of (32b) because of its position in the sentence, namely, that it is a verb phrase complement.

On the other hand, the string kunzi nevánhu áité mámbó in (33b) controls the concordial agreement zvi in ánózvída. This suggests that there is something like

+N
+CL8
+pro

 as the head noun of this string. Besides, this complement clause passes the second test for object noun phrases.

(35) Garwe ánodá chíí? (reply: kunzi nevánhu áité mámbó)

(What does Garwe like?)

What all this indicates is that the status or function of the complement clauses in (32b) and (33b) remains the same whether -ti is passivized or not. That is to say, these complement clauses continue to be dominated by VP and NP respectively. If -ti is a verb in these sentences it follows that kuti cannot be regarded as a mere complementizer always. It is more complex than that. The following sentences demonstrate further the complexity of kuti.

(36)a. Musíkana' uyu ánodá kúti, "Ndiúyé mangwana heré?"

(This girl wants to say, "Should I come tomorrow?"

b. Musíkana' uyu ánodá kúti ndiúyé mangwana heré?

(Does this girl want to bring it about that I come tomorrow?)

c. Musíkáná' uyu ánodá' kúti ndiúyé mangwána heré?

(Does this girl want me to come tomorrow?)

The meaning of -ti in these three sentences is not the same although these sentences are identical in their linear arrangement of the words. In (36a) -ti means "say, utter", in (36b) it has the reading "bring it about that, make, cause", and in (36c) it seems to be a mere complementizer and the emphasis in this sentence appears to be on "me". So it would appear that there are at least three different uses of kuti and I should like to discuss each one of them in some detail as they are crucial to the study of sentential complements in Shona.

2.3.1 Kuti (to say)

The instances where -ti means "say" seem to be quite clear and straightforward. I give a few examples of them in (37).

(37)a. Ákanyará' kúti áiva' nemóta muhapwá.

(he was ashamed - to say - he was - with an abscess - in armpit = He was shy of saying that he had an abscess in his armpit.)

b. Mashiri' ákabvotómoka kuti Keni' ákápusa.

(Mashiri - spoke unwisely - to say - Keni - he is foolish = Mashiri said without thinking about it that Keni was foolish.)

c. Mukómana' ánobvuma kuti shamwari' yáké yakatíza.

(the boy - admits - to say - friend - his - ran away = The boy admits that his friend ran away.)

d. Sani' ánoramba kuti nyika yakaténdéréra.

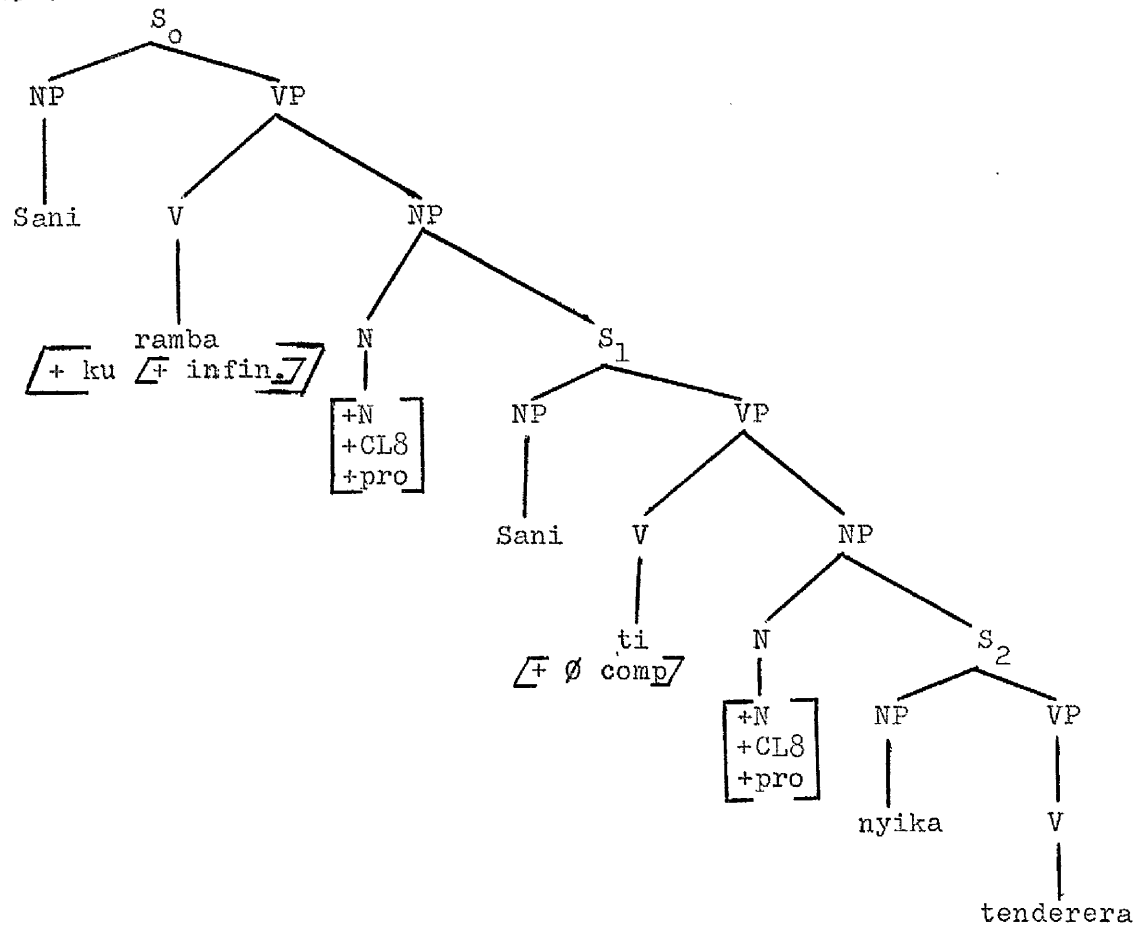
(Sani refuses to admit that the world is round.)

e. Tsuro' ákatángá kúti Bveni' áne nungo.

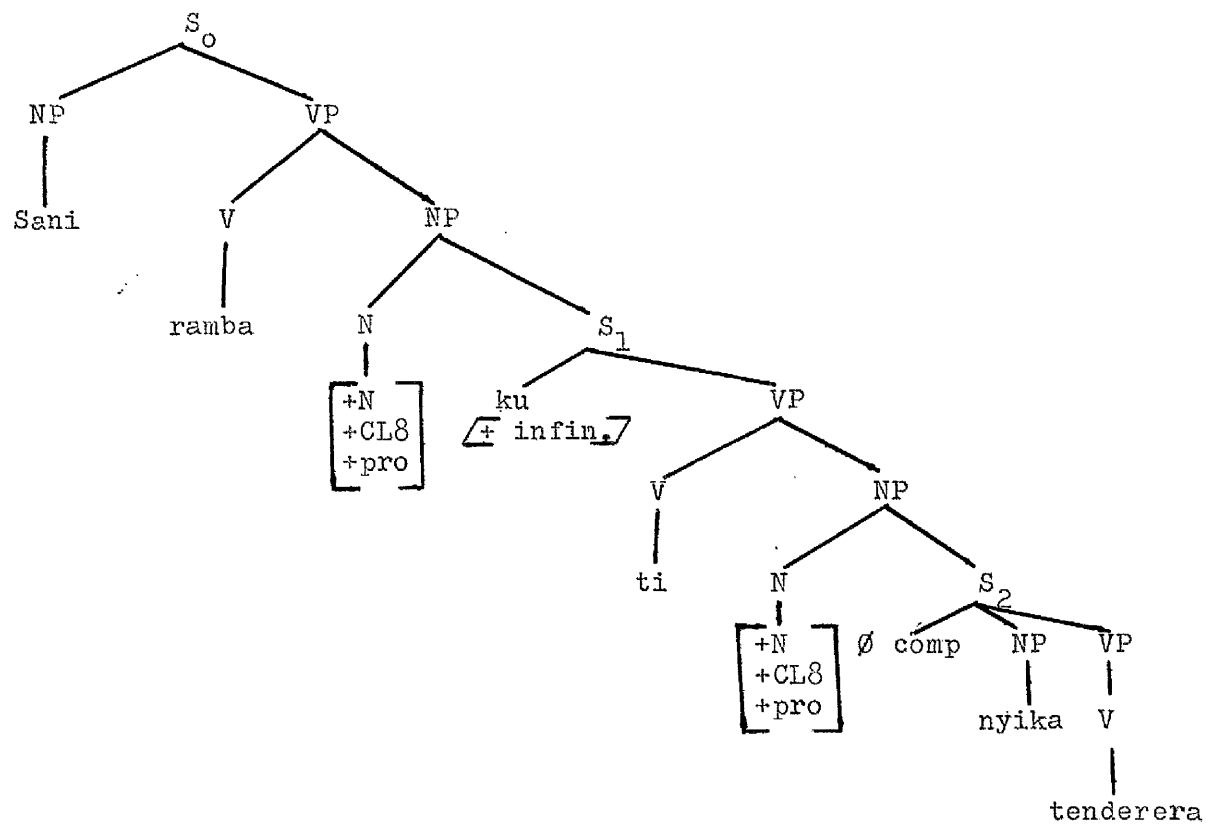
(The hare began to say that the baboon was lazy.)

All these sentences in (37) are analyzable in a similar manner. Taking (37d) as an example, we can represent its underlying structure by the diagram in (38).

(38) a.

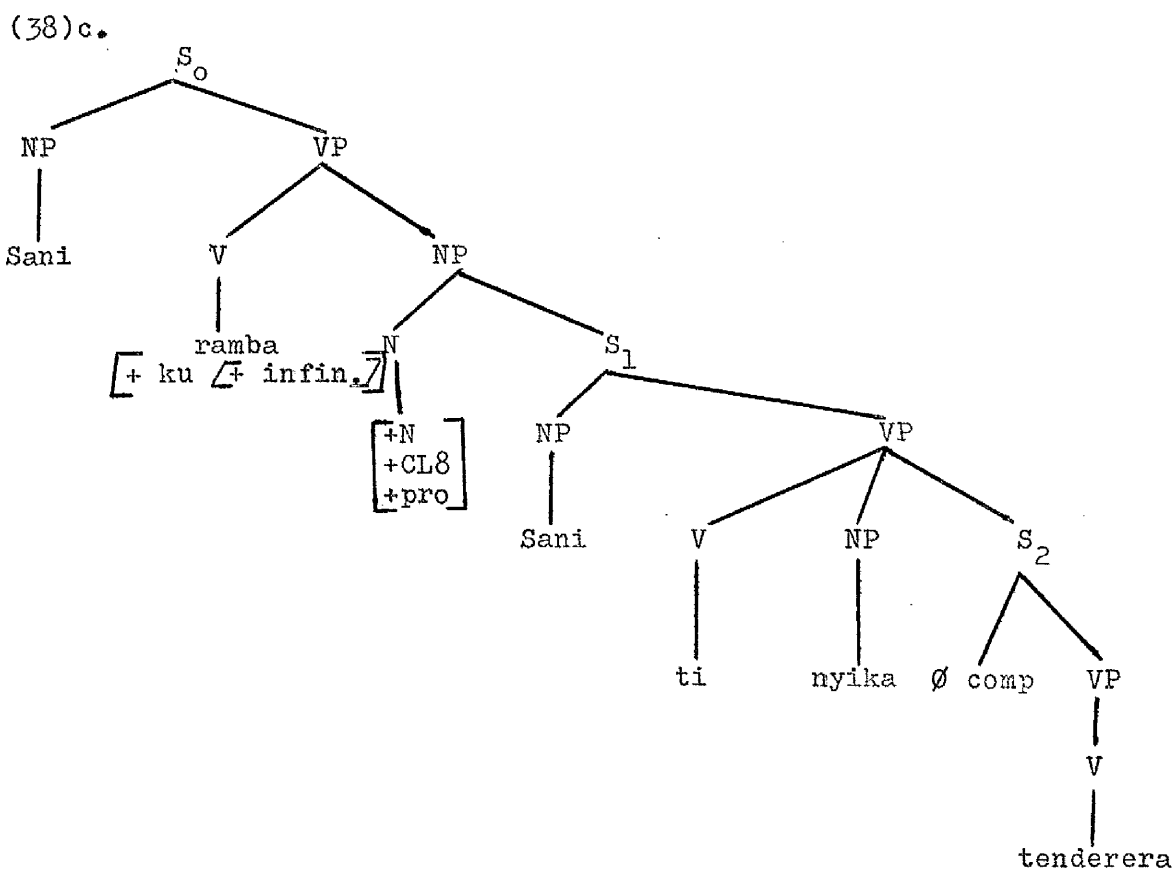


(38) b.



Applying \emptyset complementizer¹ insertion and gender copying in the second cycle, and ku [+ infinitive] insertion and Equi-NP deletion in the third cycle in (38a), the result is the tree in (38b). (Most of the transformational rules which are being mentioned now will be discussed in greater detail in Chapter Five. Notice also that as in Chapter One the transformational hypothesis of complementizer insertion is adopted in this chapter.) From this derived phrase marker is eventually obtained the sentence in (37d).

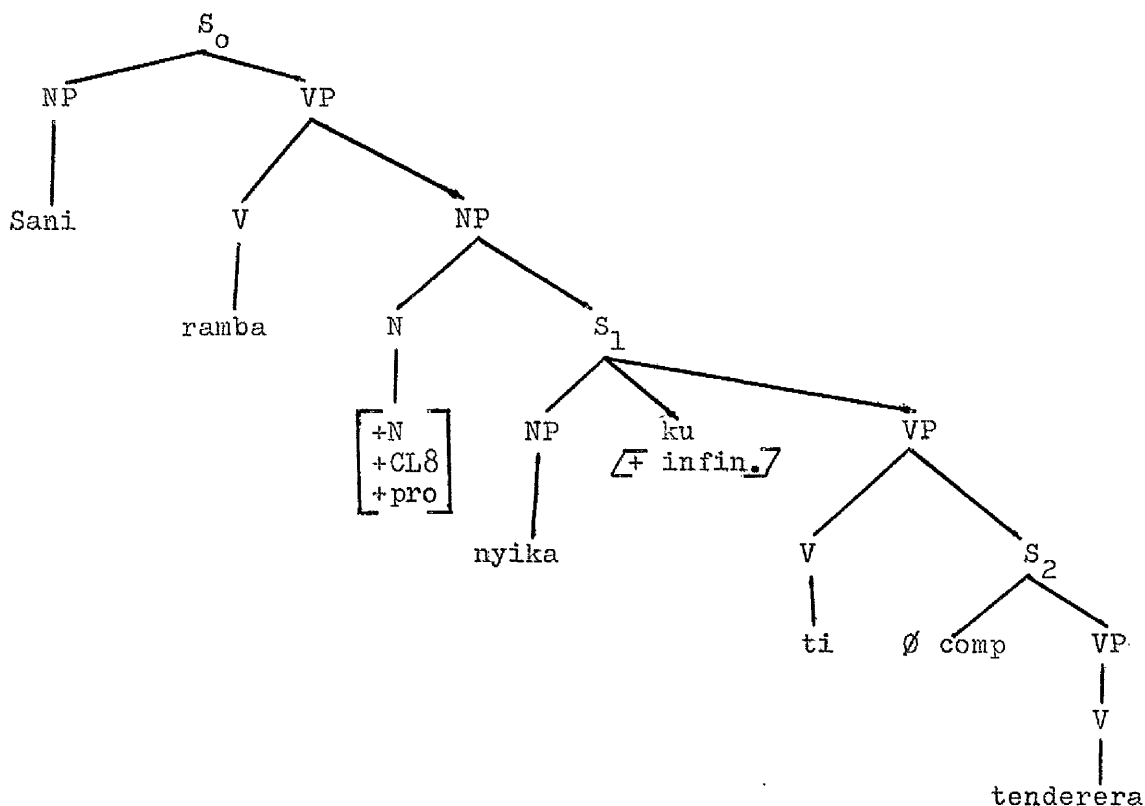
But if after applying \emptyset complementizer insertion and gender copying, object raising is then applied in the second cycle of the configuration in (38a) the result is the tree in (38c).



To this tree can be applied the object focussing rule in the second cycle, and then the same rules in the third cycle as were applied above. The structure obtained is something like (38d). After applying later rules

1. This \emptyset complementizer is discussed in 2.9 in this chapter.

(38)d.



and the rules of the phonological component we eventually come up with (39).

(39) Saní ánoramba nyika kuti yákaténdéréra.

(Sani refuses to accept that the earth is round.)

Notice that object focussing is a common phenomenon in Shona as the sentences in (40) illustrate.

(40)a.i. Ndadyá́ sádza kare.

(I have eaten sadza already.)

ii. Sadza ndadyá́ káre.

(Sadza - I have eaten - already = As for sadza I have already had it.)

b.i. Sekúru ánodá́ kúenda kumushá́ así́ marí haaná́.

(uncle - wants - to go - to home - but - money - he has none = Uncle wants to go home but he has not the money.)

ii. Kuenda kumusha' sekuru anoda' asi' mari' haana'.

(to go - home - uncle - wants - but - money - he has none =

As for going home uncle likes it but he has not the money.)

That nyika is still part of S_1 is shown by the fact that the string nyika kuti can undergo anaphoric pronominalization as in (41).

(41) Sani' anoramba kuiti yakatenderera.

(Sani refuses to admit that it is round.)

Since anaphoric pronouns of the type exemplified by i in (41) occur almost always only before verbs in the language, it can safely be concluded that -ti in (37) is a verb.

Similarly the underlying structure of (42a) below may be transformed into the structure which eventually yields (42b). The sequence of rule application is the same as for (41) except that, in place of anaphoric pronominalization, reflexivization will apply for its structural description will have been met.

(42)a. Mujubheki akati' ava' murungu.

(Mujubheki said that he had become a white man.)

b. Mujubheki akazviti' ava' murungu.

(Mujubheki said of himself that he had become a white man.)

Observe also that this -ti can be passivized as in (43b).

(See also (32) above.)

(43)a. Toni' aramba kuti Deni' akapusa.

(Toni refused to say that Deni is foolish.)

b. Deni' aramba kunzi naToni' akapusa.

(Deni refused to be said by Toni that he is foolish.)

In (43a) Toni, the subject noun phrase, is followed by an active verb -ramba which in turn is followed by a complement clause containing an active verb also -ti. The subject noun phrase Deni in (43b) is also followed by the active verb -ramba which is itself followed by a complement clause with a passive verb. In this case the mere fact that there are two different subject noun phrases but the same active verb occupying the

same position in these two sentences indicates that these sentences cannot have the same semantic reading. Admittedly this may only be contingently true. Nonetheless, although these two sentences are not paraphrases of each other, it is clear that -ti has assumed a passive form in (43b), and passivization is one of the phenomena which are attributed to verbs. It seems evident from the foregoing discussion that -ti in (36a) is a fully fledged verb.

2.3.2 Kuti (to bring it about)

I would like now to examine the second kuti which appears in (36b). The -ti in kuti can also be demonstrated to be a verb. To this end consider the following sentence:

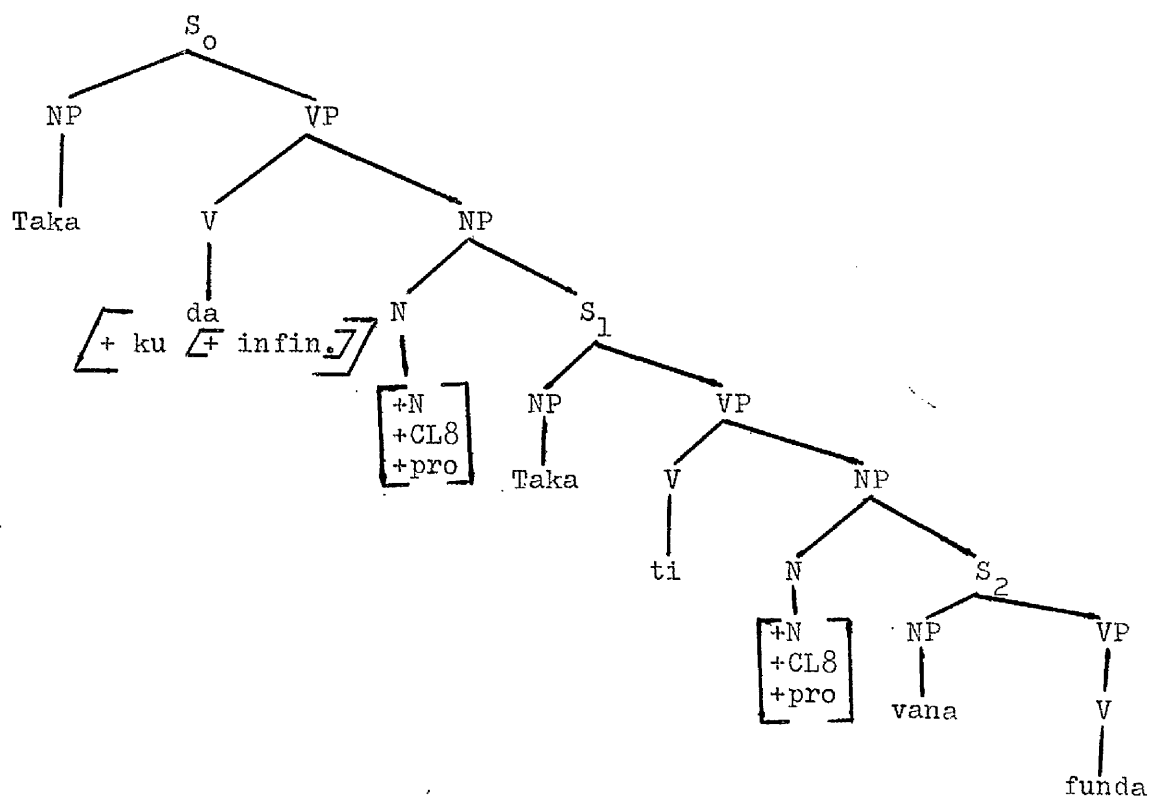
(44) Taka' ánodá kúti vaná váfúnde.

(Taka - wants - to make - children - they learn =

Taka wants the children to learn.)

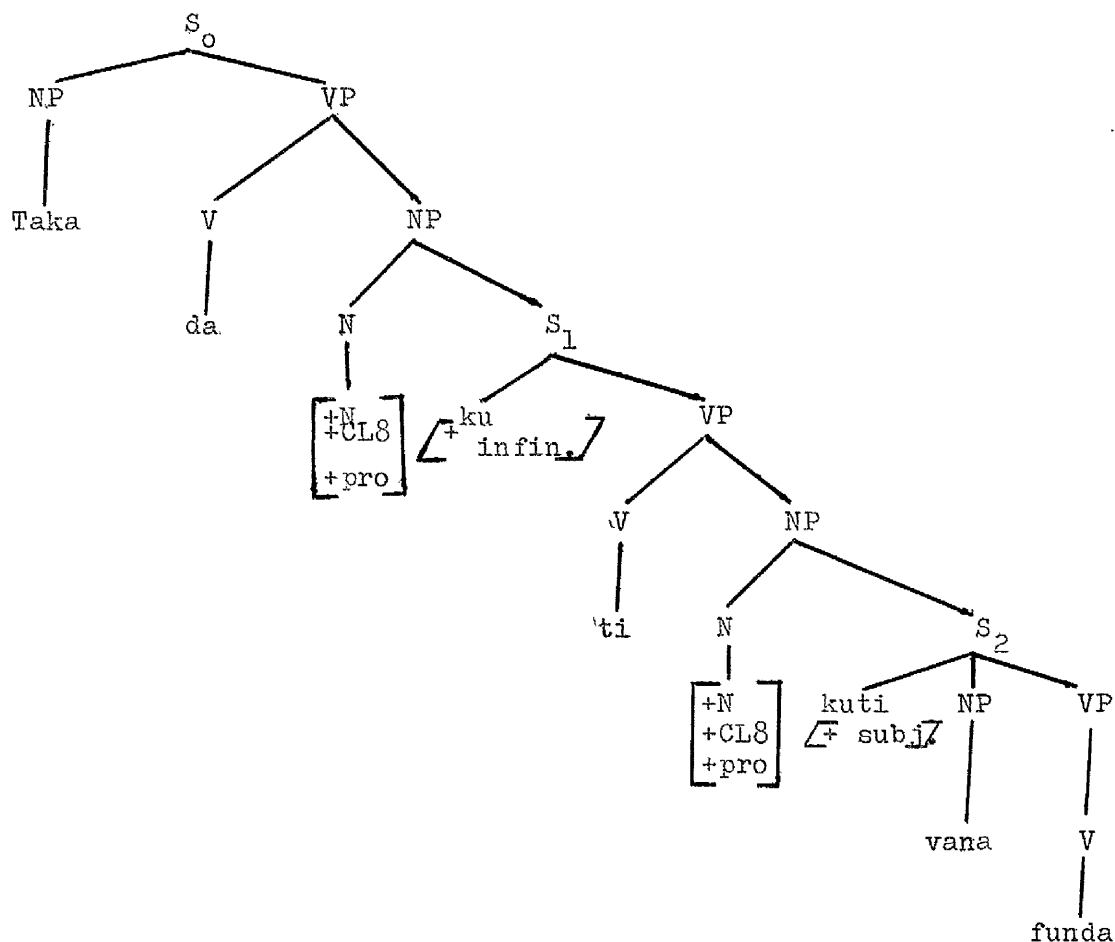
Sentence (44) is in itself ambiguous. On one reading the kuti has the meaning which it has in (36b), and on another it has the meaning which it has in (36c). Here I am concerned with the former reading. The underlying structure of (44) appears in (45a) below.

(45)a.



Applying kuti $\angle + \text{subjunctive} \angle$ insertion and gender copying in the second cycle, and ku $\angle + \text{infinitive} \angle$ insertion and Equi-NP deletion in the third cycle of the structure in (45a) the result is the configuration in (45b).

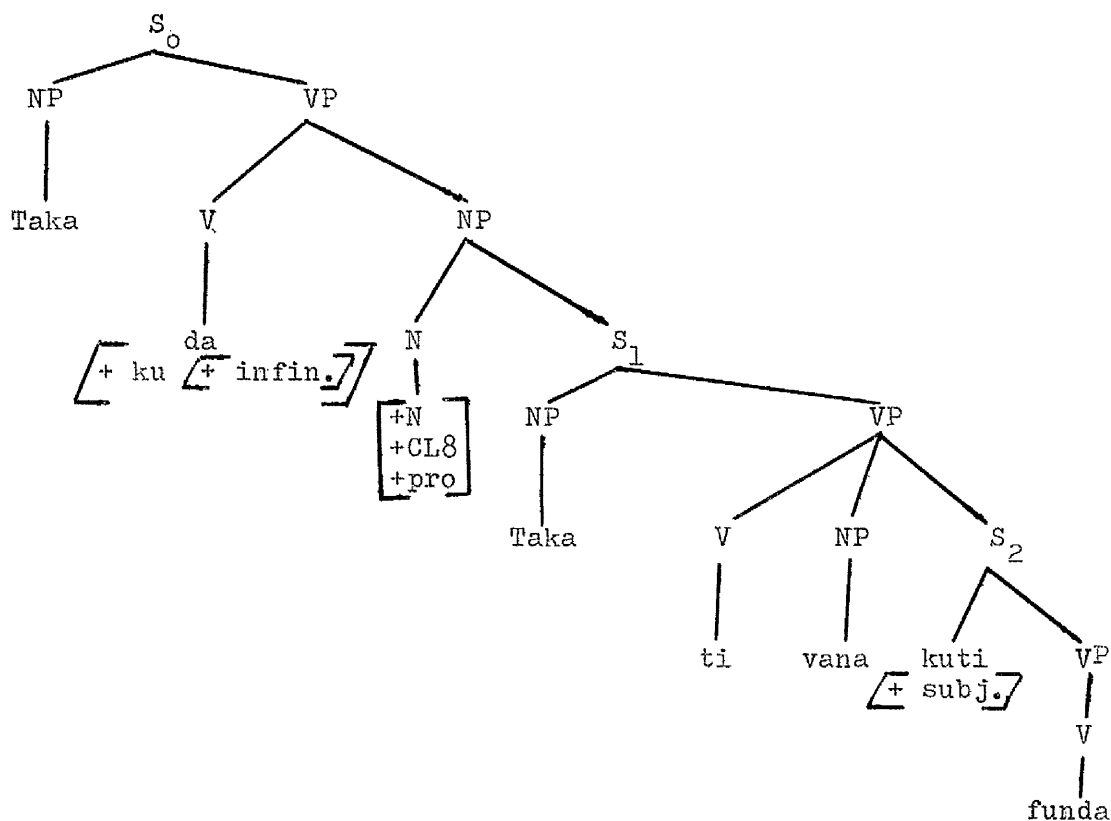
(45)b.



From this rough structure is finally obtained the sentence in (44).

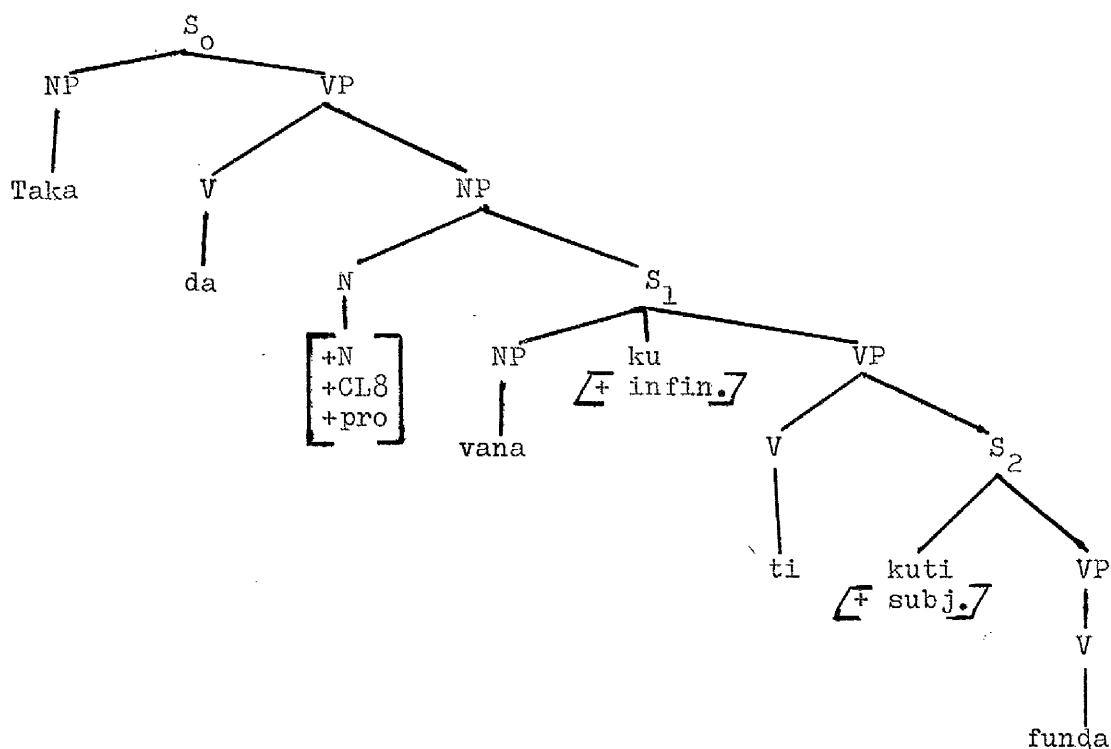
But if, in addition to applying kuti $\angle + \text{subjunctive} \angle$ insertion and gender copying in the second cycle, object raising is also applied, the result is the structure in (45c).

(45)c.



As was done in the case of the other kuti above the object focussing rule can apply now but still in the second cycle. In the third cycle the same rules as before are applied, yielding the structure in (45d).

(45)d.



From this structure is eventually derived the sentence in (46).

(46) Taka' ánodá' vana' kúti váfúnde.

(Taka - wants - children - to make it - they learn = Taka wants to make the children learn.)

Notice that when the complementizer formative kuti occurs after the verb -ti it is obligatorily deleted in surface structure. Since S_1 in (45c) meets the structural description for the rule of anaphoric pronominalization this rule can be applied resulting ultimately in (47).

(47) Taka' ánodá' kuváti váfúnde. (referring to vana')

(Taka wants to make them learn.)

We observe also that the -ti in this kuti can assume a passive form as shown in (48).

(48) Vana' vánodá' kúnzi váfúnde naTaka'.

(the children - want - to be made - they learn - by Taka =
The children are wanted by Taka to learn.)

Once more all these transformations seem to confirm that the -ti in this second kuti is a verb. The structural descriptions of these transformations which have been discussed above normally require the presence of a verb. Hereunder are further examples of this use of kuti. The sentences in (i) - (iv) in each of (49a), (49b) and (49c) correspond to the sentences in (44), (46), (47) and (48) respectively.

(49)a. i. Mambo ábvúma kuti vanhu váké váité kánzuru.

ii. Mambo ábvúma vanhu váké kúti váité kánzuru.

(The chief has agreed to allow his people to form a
local council.)

iii. Mambo ábvúma kuváti váité kánzuru.

(The chief has agreed to allow them to form a local
council.)

iv. Vanhu vávúma kúnzi váité kánzuru namambo.

(the people - agreed - to be made - they form - council -
by the chief = The people have agreed to form a local
council at the order of their chief.)

b. i. Ambúya vakárámba kuti mwaná áendé kuSinoia.

ii. Ambúya vakárámba mwaná kuti áendé kuSinoia.

(Grandmother refused to let the child go to Sinoia.)

iii. Ambúya vakárámba kumúti áendé kuSinoia.

(Grandmother refused to let him go to Sinoia.)

iv. Mwaná akárámba kunzi naambúya áendé kuSinoia.

(the child - refused - to be made - by grandmother - he
go - to Sinoia = The child refused to be ordered by his
grandmother to go to Sinoia.)

c. i. Mufudzi ánogona kuti mombe dziúyé masikáti.

ii. Mufudzi ánogona mombe kuti dziúyé masikáti.

(the herdsman - can make - the cows - they come - in
the afternoon = The herdsman can bring the cows in the
afternoon.)

iii. Mufudzi ánogona kudzíti dziúyé masikáti.

(The herdsman can bring them in the afternoon.)

iv. Mombe dzínogona kunzi dziúyé masikáti nemufudzi.

(The cows can be made to come in the afternoon by the
herdsman.)

From the discussion so far the following facts have emerged: (a) that there are at least two different verbs both with the phonological shape -ti, one has the meaning "say, declare" and the other has the meaning "make, bring it about that, cause"; (b) that these two verbs differ also in their rule feature specification. The former requires that its complement clause be in the indicative mood as in (37) or a quotation as in (36a), while the latter requires its complement clause to be in the subjunctive mood.

2.3.3 Kuti (a complementizer)

I now turn to the kuti in (36c). I shall illustrate the syntactic function of this kuti by taking the sentence in (44) which resembles (36c) in its structure. The only syntactic difference between the two

is that whereas (36c) is a question (44) is a declarative sentence and therefore slightly less complex in its derivational history. It has already been pointed out that (44) is ambiguous. Here I am concerned with the second reading of this sentence (see p.⁷⁰). I repeat this sentence below as (50) for convenience.

(50) Taka' anoda' kúti vana' vafunde.

(Taka wants the children to learn.)

Notice that although (50) and (51) differ from each other in their linear sequence, they are nevertheless paraphrases of each other.

(51) Taka' anoda' vana' kúti vafunde.

(Taka wants the children to learn.)

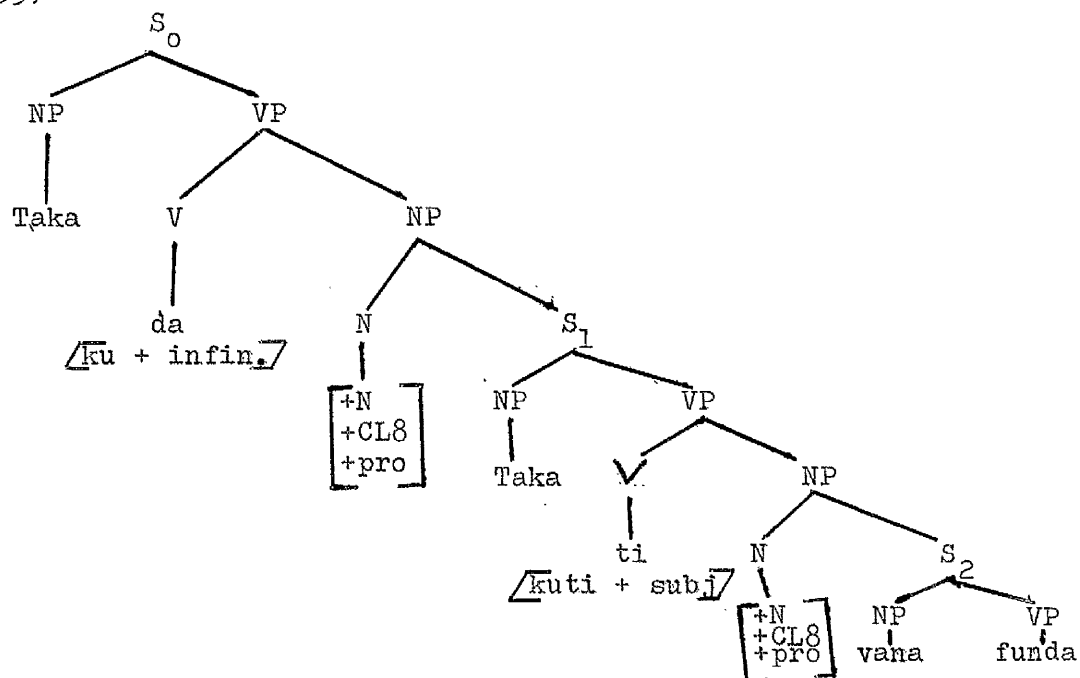
In (47) above we saw an anaphoric pronoun occurring before -ti. Anaphoric pronominalization in this case was conditioned by the verb -ti. The sentence in (50) can also appear with an anaphoric pronoun but this time in the position immediately before the verb -da' as in (52).

(52) Taka' anovada' kúti vafunde.

(Taka wants them to learn.)

In this case anaphoric pronominalization is governed by the verb -da'. Let us assume, for argument's sake, that the structure which underlies (50) is the same as the one which is outlined in (45a) which is repeated here for convenience as (53).

(53)



Adopting this analysis for (50) raises a number of problems. Firstly, there does not seem to be any sound transformational machinery which can raise vana', the subject noun phrase of S_2 , through S_1 to become the direct object noun phrase of the verb -da' in S_0 . Notice that in (51) vana' is a direct object noun phrase of -da' in S_0 otherwise anaphoric pronominalization would not have applied in (52). In the configuration in (45c) vana' was raised from a subject position in S_2 to be a direct object noun phrase of -ti in S_1 . Sentence (52) would require this same vana' to be raised again from this direct object position in S_1 to be a direct object of -da' in the next higher sentence, namely, S_0 . Secondly, the two sentences, viz. (47) and (52), in which the raised NP vana' occurs as an anaphoric pronoun in each case have two different semantic interpretations. If both these sentences are derived from an underlying structure like that in (53) by applying a series of different transformational rules, it then follows that the difference in meaning between these two sentences is attributed to the transformational rules applied. The verb -ti will be the same and it will impose kuti $\left[\begin{smallmatrix} + \\ \text{subjunctive} \end{smallmatrix} \right]$ insertion on the complement clause in both cases. (As was stated before complementizers are introduced transformationally in this chapter.) It is only the raising of vana' to two different positions in this structure to which the difference in meaning can be ascribed. This approach clearly admits that transformations are not meaning-preserving and this is contrary to one current theory in transformational grammar, and the one adopted in this study, namely, that transformations do not change the meaning of the structure to which they are applied.² If there could not be found an alternative way of accounting for such data within this current theory, then the theory itself would be open to question for there are quite a number of verbs in Shona which give us the same patterning. Further examples are given in (54) - (56).

2. For a discussion on whether transformations alter the meaning of the structures to which they are applied see Barbara Hall Partee "On the requirement that transformations preserve meaning" in Studies in Linguistic Semantics, C.J.Fillmore and D.T.Langendoen (eds.)

(54)a. Ndagóna kuti Shámbaré ágaré pasi.

(I managed to make Shambare sit down.)

b. Ndagóna kumúti ágaré pasi. (referring to Shámbaré)

(I managed to make him sit down.)

c. Ndamúgona kuti ágaré pasi. (referring to Shámbaré)

(I prevailed upon him to sit down.)

(55)a. Mudzimái uyu ákatádza kuti murúme wáké áregé hwahwá.

(This woman failed to persuade her husband to stop drinking beer.)

b. Mudzimái uyu ákatádza kumúti áregé hwahwá. (referring to murúme wáké)

(This woman failed to make him stop drinking beer.)

c. Mudzimái uyu ákamútádza kuti áregé hwahwá. (referring to murúme wáké)

(This woman did not prevail upon him to make him stop drinking beer.)

(56)a. Murungu ákaténdera kuti Goto áendé kúnoóna amái váké vairwára.

(The boss allowed Goto to go and see his mother who was ill.)

b. Murungu ákaténdera kumúti áendé kúnoóna amái váké vairwára.

(referring to Goto)

(The boss agreed to make him go and see his mother who was ill.)

c. Murungu ákamúténdera kuti áendé kúnoóna amái váké vairwára.

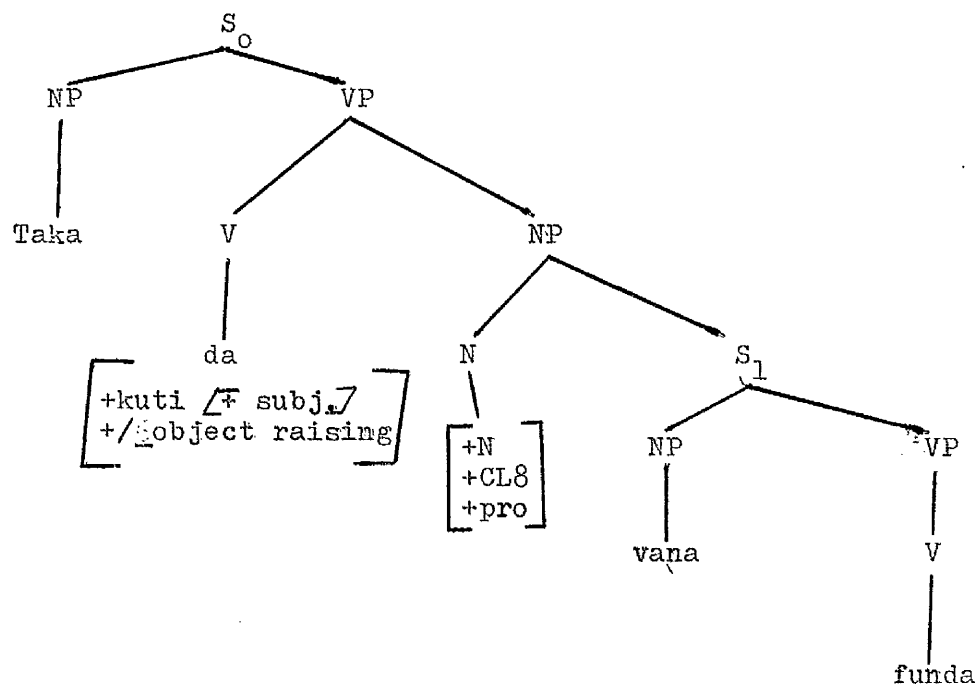
(referring to Goto)

(The boss allowed him to go and see his mother who was ill.)

I believe that the structure which underlies (52) is different from that which underlies ~~(48)~~ (47). In other words the diagram in (53) is not the underlying structure of (52). The claim made here is that kuti in (52) is a complementizer, not a verb, and that this complementizer may be followed by a clause in the subjunctive mood or in the indicative mood. It is proposed that the underlying structure of (52) is as

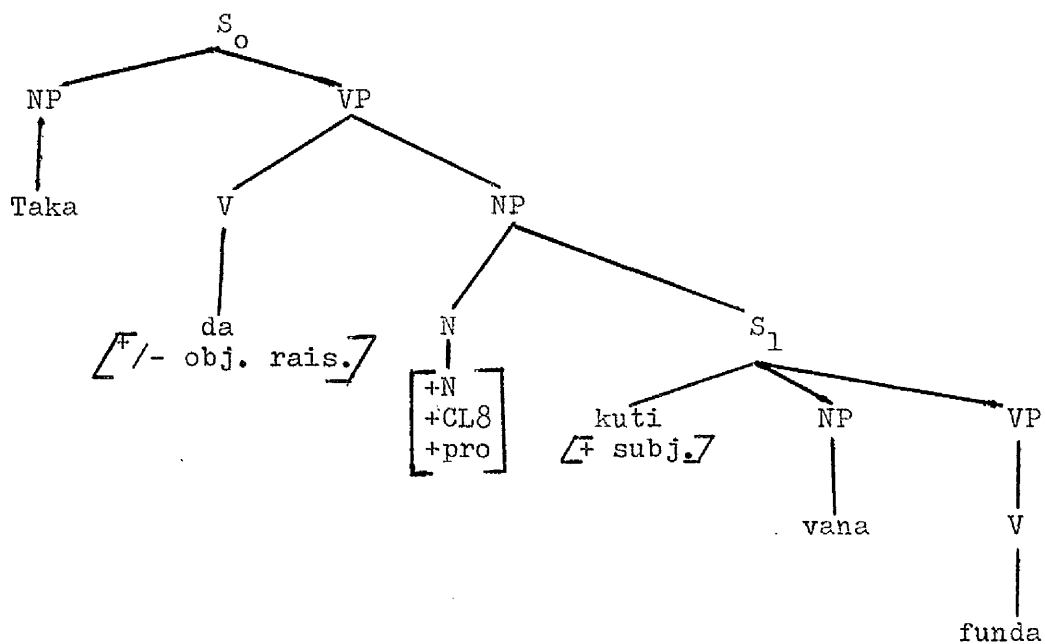
outlined in (57a) below.

(57)a.



No transformational rules of interest to us in the present discussion apply in the first cycle. In the second cycle kuti $[-subj.]$ insertion applies resulting in the tree structure in (57b).

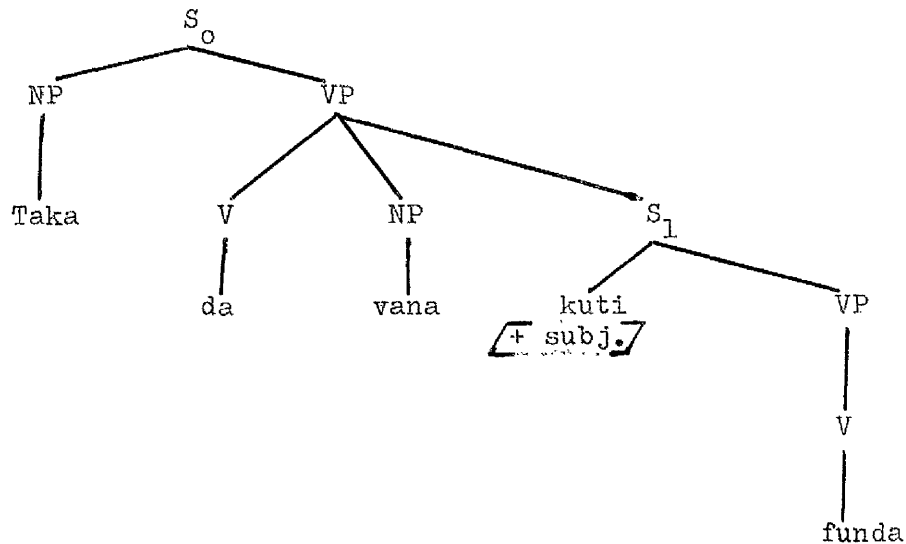
(57)b.



If we choose not to apply any of the transformations determined by the optional rule features which are governed by the verb -da', the resulting sentence will be (50).

But if, after applying kuti [+subjunctive] insertion and gender copying as above, we choose to apply object raising, still in the second cycle, to the tree in (57b) we get the structure in (57c).

(57)c.



If no other (optional) rule features of -da' are applied we eventually obtain the sentence in (58).

(58) Taka' ánodá vana' kúti váfunde.

(Taka wants the children to learn.)

In this sentence the focus is on vana'. Notice that sentence (58) is identical, in terms of linear sequence, with sentence (46). Nevertheless their transformational histories are different. In (58) vana' is a direct object noun phrase of -da' whereas in (46) it is a direct object noun phrase of -ti which has been front-shifted in order to focus attention on it. Now if to the structure in (57c) we apply anaphoric pronominalization we get the sentence in (52). Here are further illustrative examples but with complementizer kuti [+indicative] this time. The sentences (i) - (iii) in each case correspond to the sentences in (50), (58) and

(52) respectively.

(59)a.i. Máko ákanzwa kúti Tembéni ákatíziswa.

ii. Máko ákanzwa Tembéni kúti ákatíziswa.

(Mark heard that Tembeni eloped with someone.)

iii. Máko ákamúnzwa kúti ákatíziswa.

(Mark heard that she eloped with someone.)

b.iN Ndinoziva kúti Maria naKembo vanodana.

ii. Ndinoziva Maria naKembo kúti vanodana.

(I know that Mary and Kembo love each other.)

iii. Ndinoziva kúti vanodana.

(I know them that they love each other.)

c.i. Zuze átaura kúti nyaya yácho yápera.

ii. Zuze átaura nyaya yácho kúti yápera.

(Zuze said that the affair was over.)

iii. Zuze átaura kúti yápera.

(Zuze said that it was over.)

d.i. Tande ácherechedza kúti Keni haana kubvisa mari.

ii. Tande ácherechedza Keni kúti haana kubvisa mari.

(Tande noticed that Keni did not pay any money.)

iii. Tande ámucherechedza kúti haana kubvisa mari.

(Tande noticed it of him that he did not pay any money.)

e.i. Babá aidaira kúti roora richabviswa.

ii. Babá aidaira roora kúti richabviswa.

(Father believed that the bride price would be paid.)

iii. Babá airidaira kúti richabviswa.

(Father believed that it would be paid.)

f.i. Tinotenda kúti mombe dzaíta basa.

ii. Tinotenda mombe kúti dzaíta basa.

(We are thankful for the work that the oxen have done.)

iii. Tinodzitenda kúti dzaíta basa.

(We are thankful for the work they have done.)

One further observation with this use of kuti as a complementizer is that after object raising has applied the passive rule can be applied with the resulting sentence being synonymous with the active sentence. This presumably ~~is~~ is due to the fact that passivization is operating in the topmost S. The following are the passives of the sentences in (58) and (59).

(60)a. Vaná vanodiwá naTaka' kúti váfunde. (cp. (58))

(The children are required by Taka to learn.)

b. Tembéní ákanzwikwá naMáko kúti ákatíziswá. (cp. (59a))

(Tembeni - was heard - by Mark - that - she eloped with someone = Mark heard that Tembeni eloped with someone.)

c. Mariá naKémbo vānozívíkānwā neni' kúti vānodānā. (cp. (59b))

(Mary and Kembo are known by me to love each other.)

d. Nyayá yácho yátáurwā naZúze kúti yápera. (cp. (59c))

(The affair was said by Zuze to be over.)

e. Kení ácherechedzwa naTānde kúti haaná kúbvisa mari'. (cp. (59d))

(Keni was noticed by Tande not to have paid any money.)

f. Róóra ráidáirwā nababá kúti ríchabvísu. (cp. (59e))

(The bride price was believed by father to be about to be paid.)

g. Mombe dzínótendwā nesú kúti dzáíta basa. (cp. (59f))

(the oxen - are thanked - by us - that - they did work = We appreciate the service done by the oxen for us.)

But when kuti was turned into the passive in its other two uses which were discussed above, the active sentences and their seemingly corresponding passive sentences did not carry the same meaning. This was the case with the pair of sentences in (43), and the sentences in (44) and (48).

Notice also that this kuti does not seem to function as a verb anywhere. If it is insisted that -ti here is a verb, then this -ti, unlike the other two that have been seen, does not permit object raising

and anaphoric pronominalization as the sentences in (61) indicate. These sentences correspond to those in (59).

- (61)a. *Máko ákanzwá kumúti ákatíziswá. (referring to Tembéni)
 b. *Ndinozirá kuváti vánodána. (referring to María naKémbo)³
 c. *Zúze átáura kúti yápera. (referring to nyaya yácho)
 d. *Tánde ácherechedza kumúti haána kúbvisa mari. (referring to Kení)
 e. *Babá áidáirá kurúti ríchabvíswa. (referring to roóra)
 f. *Timótenda kudzíti dzáita basa. (referring to mombe)

However, a verb which is followed by a noun phrase as part of its strict subcategorization need not allow object raising (if the NP is abstract and contains an embedded sentence) or anaphoric pronominalization. But in the case of this kuti if we maintain that it contains a verb -ti, we are hard put to it to describe in a convincing way how the subject noun phrase of its complement clause can move the whole way up to be a direct object noun phrase of the main verb of the sentence which dominates this kuti as was pointed out on p. 76.

But as we have already noticed with the verb -da, anaphoric pronominalization can apply in the VP that immediately dominates -da itself (see (52)) or in the VP that dominates -ti (see (47)). Nevertheless it has also been pointed out that the two sentences which we get have different semantic interpretations. So -da happens to be a verb which can allow both ku /+ infinitive/ insertion and kuti /+ subjunctive/ insertion. Most of the verbs in (61) on the other hand, while permitting kuti /+ indicative/ insertion, do not allow ku /+ infinitive/ insertion.

It is also observed that the passive sentences in (60) can all occur with kunzi substituted for kuti without effecting any further change either in the structure or in the meaning of these sentences.

3. Sentence (61b) would be acceptable if -ti meant "say".

This is shown in (62).

- (62)a. Vana' vanodiwa' naticha kunzi vafunde.
 b. Tembeni akanzwikwa maMako kunzi akatiziswa.
 c. Maria naKembo vanozivikanwa meni kunzi vanodana.
 d. Nyaya yacho yataurwa naZuze kunzi yapera.
 e. Keni acherechedzwa naTande kunzi haana kubvisa mari.
 f. Roora raidairwa mababa kunzi richabviswa.
 g. Mombe dzinotendwa nesu kunzi dzaita basa.

It has already been stated above that kunzi is the passive form of kuti when kuti is a verb as in (43) and (48). Recall also that normally when a verb is turned into the passive form in a sentence, that sentence undergoes a structural change, the most noticeable change being that the object noun phrase becomes the grammatical subject of the passive sentence. In the sentences in (60) and (62) we have then a strange situation in which kuti, an active form of a verb, interchanges freely with its passive form kunzi without effecting any structural change in the sentence. We also have the strange situation in which kunzi in one case is a true passive which causes the normal structural change as in (43) and (48), and in another case is a passive which has no syntactic function.

2.3.4 Kunzi

There are strong indications that kunzi in (62) is not a true passive verb. For one thing it appears to be one of a very few verbs in Shona (Zezuru dialect) which behave in this curious fashion. Notice also that kunzi in (62) occurs only after a verb which itself is in the passive form in the higher sentence. But in (43b) and (48) the verb in the higher S is in the active form. This seems to be the crucial difference. I believe that this kunzi is a complementizer, just as kuti with which it appears as a free variant in such sentences is. Its passive form can be described as some form of assimilation which is conditioned by the preceding passive verb. This assimilation however does not seem

to go through more than one S. It is possible that diachronically the complementizer kuti/kunzi might have been the infinitive form of some active verb -ti (presumably a different -ti from the other two that were discussed earlier on) and its passive form -nzi, but that it lost its verbal character in the course of time. Synchronically, however, this kuti/kunzi is a mere complementizer. This phenomenon is by no means restricted to -ti only. There are other verbs in Shona which have either lost or are in the process of losing their verbal character and assuming a different categorial status. In this regard consider the following two verbs: -nyanga (although, even if) and -bva (go ^{away} ~~away~~, begin at, come from).

As a true verb -nyanga may be found in sentences like the following:

- (63)a. Sara', néchirwéré cháké ichi, ányángoenda kuchipatara
hazvíchambomúbátsirá.

(As for Sara's illness, even if she goes to the hospital it will not help.)

- b. Kunyangoendako hapána chaúnowana.

(Even if you go there there is nothing that you will get.)

In these sentences -nyanga is an intransitive verb which cannot passivize under any circumstances. Notice that in (63b) this verb is in the infinitive mood. But there is another infinitive form in which the final vowel is /e/ as in kunyange (although, even if). This second infinitive form can occur with the passive extension as in kunyangwe with exactly the same meaning and without causing any structural change in the S in which it appears. That the meaning of -nyanga and kunyange/kunyangwe is the same is obvious enough. But kunyange/kunyangwe is now functioning as a conjunction of some kind or possibly as a complementizer as shown in (64).

- (64) Kunyange akauya nhási hazvibátsiré.

(Even if he comes today it won't help.)

Furthermore, although -nyanga as a true verb (synchronically at least) requires that its complement clause be a contracted infinitive, kunyange/kunyangwe on the other hand is followed, not by a contracted infinitive⁴, but by a clause which is in the participial mood or consecutive mood as in (65) and (66) respectively.

(65) Nzou ínogona kusímúdzá dándá kunyange rákákúra séi.

(An elephant can lift up a log no matter how big it may be.)

(66) Sará, néchirwéré cháké ichi, kunyange akaenda kuchipatara hazvímubátsire.

(Sara, as for her illness, even if she goes to the hospital it will not help her.)

In fact kunyange can be followed also by an NP or by a relative clause as in these two sentences:

(67) Handídí chínhu nhási kunyange tíi zváyo.

(I do not want anything today, not even tea.)

(68) Nzou ínogona kusímúdzá dándá kunyange rákákúra chaizvo.

(An elephant can lift up a log even one which is very big.)

Moreover the forms kunyange/kunyangwe can occur simply as nyange/nyangwe with the same meaning. Nyange/nyangwe cannot in any way be regarded as imperatives as one would expect. The infinitive and the imperative forms of this verb now perform the same function, namely, that of a conjunction of some sort.

The verb -bva would occur in a sentence like the following:

(69) Tándé ákabvá páno svóndo rákápera.

(Tande left this place last week.)

(70) Tándé áida kubva páno svóndo rákápera.

(Tande wanted to leave this place last week.)

In (70) this verb appears in the infinitive mood. But the infinitive form kubva can also mean simply "since, from that time" which in a way

4. Contracted infinitives are discussed in 6.2.1.2.

is still related to the meaning of -bva given on p.84 . With the meaning "since" kubva is a conjunctive of some kind. Its syntactic behaviour is different from that in (70).

(71) Suzi' árí kúngorwára' kúbva musí' úye.

(Suzi has been ill since that day.)

That kubva in this case derives from a verb is shown by the fact that it can occur with the applied extension as in (72). The meaning of the sentence remains unaltered.

(72) Suzi' árí kúngorwára' kúbvira musí' úye.

(Suzi has been ill since that day.)

Extensions such as the applied, the passive and so forth are features which are normally associated only with verbs in Shona.

2.4 Kana /+ consecutive/

For the moment let us consider the embedded sentences in the following two sentences.

(73) Kana amái váToko' vakamutúká hazvibátsíré.

(Even if Toko's mother reprimand her it won't help.)

(74) Kana akasvika páno' zvingashúre.

(If ever he gets here it will be an ill omen.)

The embedded clauses which are underlined are NP complements in subject position. Both of them pass the tests for noun phrases in subject position. In the first place, both strings kana amái váToko' vakamutúká and kana akasvika páno' control the concordial agreement zvi in their respective sentences. (This concord zvi is underlined.) Secondly, if the interrogative pro-form test is applied the questions which result are those in (75) and (76) respectively.

(75) Chii chisingabátsíré?

(What won't help?)

(76) Chii chingáshúre?

(What would be ominous?)

The replies to these questions are kana amái váTokó vakamutuká (even if Toko's mother reprimand her) and kana akasvika páno (if ever he gets here) respectively.

Both of these NP complements are introduced by the word kana, while the clause so introduced is in the consecutive mood. (Notice that the word "consecutive" as used here serves only as a label referring to the tone pattern on the verb, and not necessarily to consecutive action semantically.) In the noun phrase complements of the type exemplified in (73) and (74) we are provided with another complementizer, namely, kana /⁺ consecutive.

2.5 Kana /⁺ participial

There is yet another complementizer which is introduced by the word kana. In this case the clause following kana is in the participial mood as in (77) - (80).

(77) Kana Pedzi' áúya némari' yedóro zvanáka.

(If Pedzi has brought some money with which to buy beer it is all right.)

(78) Bomba haácháyéuka kana makambósangana.

(Bomba no longer remembers whether you have met before.)

(79) Ndakanganwa kana ndakazvíréva.

(I can't remember if I said it.)

(80) Feso ákatángá kúrangarira kana áizoóná nyíka yáké zvakáre.

(Feso began to wonder whether he would see his fatherland again.)

In (77) the complement clause is in subject position while in (78) - (80) the complement clauses are in object position. It can be demonstrated easily that these complements are in effect noun phrases. In (77) the string kana Pedzi' áúya némari' yedóro controls the concordial agreement zv in zvanáka. Furthermore the interrogative pro-form test yields the string

(81) Chii chanáka?

(What is all right?)

to which the answer is kana Pedzi' áúya némari yedóro (if Pedzi has brought some money with which to buy beer). To illustrate that the complements in (78) - (80) are object noun phrases I shall consider (78) only. It passes all the tests for object noun phrases.

(82)a. pseudo-cleaving;

Kana mákambósangana ndízvo/zvaásisáyeuke Bóm̃ba.

(Whether you met before is what Bomba no longer remembers.)

b. passive;

Kana mákambósangana hazvícháyéukwa naBóm̃ba.

(whether - you met before - is not remembered - by Bomba = Bomba does not remember whether you have met before.)

c. interrogative pro-form;

Bóm̃ba haácháyéuka chíi? reply: kana mákambósangana

(Bomba does not remember what? (reply: whether you have met before))

d. object anaphora;

Bóm̃ba haachazviyeuka. (referring to kana mákambósangana)

(Bomba does not remember it.)

2.5.1 Among the clauses which are introduced by kana [+ participial] are embedded or indirect questions such as those in (78) - (80). A brief comment on non-embedded questions is in order here since it will help us to understand the nature of embedded questions in Shona. The main interrogative formatives in Shona are: here (yes/no); -pi (which one?); -i (what sort of?); ani (who?); rinhi (when?); sei (how, in what way?); -ngani (how many?) and -su (expressing dissatisfaction). These are underlined in the examples below.

(83) Vana' vádya sadza here?

(Have the children had their meal already?)

(84) Mombe dzaénda kúpi?

(Where have the cattle gone?)

(85) Waóna chii' kúmunda?

(What did you see at the field?)

(86) Sara' ákarwa' nani?

(Sara fought with who?)

(87) Chitíma chínosvika rínhi?

(When will the train arrive?)

(88) Jongwé akáita izvi sei?

(Why did Jongwe do this?)

These interrogative formatives are mutually exclusive in any one simple sentence. The interrogative formative in (83) however differs from the others. The question which it signals requires either a "yes" or a "no" for an answer, whereas the questions in (84) - (88) require much more information than just a "yes" or a "no". The answers to the questions in (84) - (87) are noun phrases of one kind or another. The interrogative formatives -pi, -i, ani, rinhi and ngani can in effect substitute for noun phrases. The question in which sei occurs requires an answer which states the way in which a given action (or state) is accomplished (or entered into). Question formation in Shona is a topic which is as yet to be investigated more fully. The brief comment above on this topic will nevertheless be adequate for the purpose at hand.

2.5.2 Now let us consider ^{how} the question in (83) above differs from (89).

(89) Sara' ábvúnza kana vana' vádya sadza.

(Sara asked whether the children have had their meal.)

Notice that (89) resembles in structure the sentences in (78) - (80). Although compelling evidence is still scanty, it would seem that the string kana vana' vádya sadza is in effect a question which requires a "yes" or a "no" for an answer in the same way that (83) does. In this

respect it is especially interesting that (89) may be paraphrased by (90) in which the "yes/no" question actually appears.

(90) *Sará ábvúnza mubvunzo unóti, "Vaná vádya sadza here'?"*

(Sara asked the question, "Have the children had their meal?"

Another point which has already been noted is that the string kana wana' vádya sadza is a noun phrase complement.

It is observed also that the interrogative formative here' occurs in non-embedded questions only, while kana in this particular case occurs in embedded questions. That is, the two are in complementary distribution. They seem to constitute one morpheme in this case. A string like the one in (91) is totally ungrammatical.

(91) **Sará ábvúnza kana vaná vádya sadza here'.*

Another interesting observation is that kana introduces an indirect question of the here' type only and none of the others as is shown by the ill-formedness of (92) - (96).

(92) **Sará ábvúnza kana mombe dzaéndá kúpi.*

(93) **Sará ábvúnza kana waóna chii' kumunda.*

(94) **Sekái ábvúnza kana Sará ákarwá naani'.*

(95) **Sará ábvúnza kana chitíma chínosvika rínhi.*

(96) **Sará ábvúnza kana Jongwé akáita' izvi séi.*

For these other questions kuti [indicative] is the introducing complementizer as shown by the grammaticality of (97) - (101).

(97) *Sará ábvúnza kuti mombe dzaéndá kúpi.*

(Sara asked where the cattle went.)

(98) *Sará ábvúnza kuti waóna chii' kumunda.*

(Sara asked what you saw at the field.)

(99) *Sekái ábvúnza kuti Sará ákarwá naani'.*

(Sekai asked who Sara fought with.)

(100) *Sará ábvúnza kuti chitíma chínosvika rínhi.*

(Sara asked when the train would arrive.)

(101) Sara' ábvúnza kuti Jongwé' ákáíta izvi séi.

(Sara asked why Jongwe did this.)

Notice that kuti [+indicative] can also introduce a here' type of question but only if the formative here' is retained in a position after the verb of the clause which it questions as in (102).

(102) Sara' ábvúnza kuti vana' vádya sadza here'.

(Sara asked whether the children have had their meal.)

Sentence (102) is synonymous with (89). Other examples of sentences like (102) are given below.

(103) Ndinoda' kuzíva kúti makáma mombe kare here'.

(I want to know whether you have already milked the cows.)

(104) Ticháona kuti Mberí' ánogona kutámbá bhóra here'.

(We shall see whether Mberi knows how to play football.)

(105) Shámwari' yángu íchandiúdzá kúti munhu úye ákadzoka here'.

(My friend will tell me whether that person came back.)

All the sentences in (103) - (105) may occur alternatively with kana [+participial] as complementizer for their embedded questions without effecting any semantic change.

(106) Ndinoda' kuzíva kana makáma mombe kare.

(107) Ticháona kana Mberí' achígoná kutámbá bhóra.

(108) Shámwari' yángu íchandiúdzá kana munhu úye ákadzoká.

2.6 Deletion of kana

In this connection there are four occurrences of kana to be considered which differ according to their meaning. These are kana (time when), kana (if, expressing a condition), kana (although, even if), and kana (whether). The rest of this subsection will be devoted to describing when kana may be deleted and when it may not.

2.6.1 kana (time when)

This kana is invariably followed by a clause in the participial

mood. If the tense in the higher S is either a (recent past) or aka (remote past), kana is obligatorily deleted as shown by the ill-formedness of the (a) sentences and the well-formedness of the (b) sentences below.

(109)a. *Kana vásvika' vakágara pasi'.

b. Vásvika' vakágara pasi'.

(On arrival they sat down.)

(110)a. *Kana vavhimi' vachipédza kudya' vakápinda munzira.

b. Vavhimi' vachipédza kudya' vakápinda munzira.

(Having finished their meal the hunters set out on their journey.)

(111)a. *Kana mombe yáneta' nekurima yakatángá kurará.

b. Mombe yáneta' nekurima yakatángá kurará.

(When the ox was tired because of ploughing it began to lie down.)

(112)a. *Kana váchaenda' havána' kunzwa' nzara asi' pakudzoka.

b. Váchaenda' havána' kunzwa' nzara asi' pakudzoka.

(When they were still on their way there they didn't feel hungry, but on their way back (they did))

But if the tense indicator in the higher S is any other than a or aka, kana is optionally deleted without effecting any change in meaning.

(113)a. Kana vásvika' vaigara pasi'.

b. Vásvika' vaigara pasi'.

(Having arrived they used to sit down.)

(114)a. Kana mvúra yóuya hapána' chakanáka nekupisa kwakurí kúita.

b. Mvúra yóuya hapána' chakanáka nekupisa kwakurí kúita.

(When the rain comes it will be terrible because the weather is very hot.)

(115)a. Kana águta hwahwa' anotaurisa.

b. Águta hwahwa' anotaurisa.

(When he has had a lot of beer he talks too much.)

(116)a. Kana mádyá mósímuka móíta basa.

b. Mádyá mósímuka móíta basa.

(When you have had your meal you stand up and do some work.)

2.6.2 kana (if)

When kana introduces a conditional clause, that clause will be in either the consecutive mood or the participial mood. Kana followed by the consecutive mood may be substituted freely with kuti. This kuti seems to be different from the other forms of kuti which were discussed above.

(117) Kana/kuti akagona kugadzira midzímú yése iyi ánganzí múrume.

(If he manages to propitiate all his ancestral spirits, he may be said to be a man.)

(118) Kana/kuti ukasvika pánó ndinókurová.

(If you come here I will beat you.)

(119) Kana/kuti Musárápasi akaita izvozvo ímhosva yáké.

(If Musarapasi does that it will be his fault.)

This kana/kuti introducing a clause in the consecutive mood may be deleted optionally without disturbing the meaning of the clause. Hereunder are the sentences (117) - (119) with kana/kuti deleted.

(120) Akagona kugadzira midzímú yáké iyi yése iyi ánganzí múrume.

(121) Ukasvika kúnó ndinókurová.

(122) Musárápasi akaita izvozvo ímhosva yáké.

Examples of conditional clauses introduced by kana [+ partic.] are provided below.

(123) Kana Mávis ásiná kúzosvika kúnó akatádzá.

(If Mavis didn't get here she didn't do the right thing.)

(124) Kana ákafá achízvisungirirá pamusána pémazwi ényú muchámurípa chéte.

(If he died by hanging himself because of what you said you will eventually have to propitiate his spirit.)

(125) Kana takángánisá tíúdzeíwo.

(If we have done wrong please tell us.)

In (123) - (125) kana may not be deleted as is shown by the ill-formedness of (126) - (128).

(126) *Mávis ásiná kúzosvika ákatádza.

(127) *Ákafá achízvisungirirá pamusána pémazwí ényú muchámurípa chéte.

(128) *Takángánisá tíúdzeíwo.

Notice that (125) could also mean "when we have made a mistake please tell us". With this meaning, that is, expressing "time when", kana is optionally deletable as was observed above, hence (128) would be a well-formed sentence in that case.

2.6.3 kana (although, even if)

With this meaning kana interchanges freely with kunyange and is normally accompanied by a clause in the consecutive mood. In this case kana may not be deleted.

(129) Kana/kunyange ukashupika séi handimbokúbátsírá.

(No matter what difficulties you will get into I will not help you.)

(130) Kana/kunyange kukanaya tinótoti tiendé chéte nhási kumushá.

(Even if it rains we will have to go home today all the same.)

It would appear that kana/kunyange may be followed also by a clause in the subjunctive mood as (131) and (132) show.

(131) Kana/kunyange úshupike séi handimbokúbátsírá.

(132) Kana/kunyange kunáyé tinótoti tiendé chéte nhási kumushá.

The sentences in (131) and (132) have the same meaning as (129) and (130) respectively. In (131) and (132) however kana/kunyange seems to be optionally deletable.

(133) Ushupike séi handimbokúbátsírá.

(134) Kúnayé tinótoti tiéndé chéte nhási kumushá.

But in the following sentence kana/kunyange may not be deleted without either drastically altering its meaning or rendering the sentence ungrammatical.

(135) Kana/kunyange akaúyá nhási hazvíchatiyámúra.

(Even if he comes today it is not going to help us.)

If kana/kunyange is deleted from (135) the result is (136).

(136) *Akaúyá nhási ~~hazvíchatiyámúra~~ hazvíchatiyámúra.

which as a paraphrase of (135) is ungrammatical. Sentence (136) can only be well-formed if it expresses, not a concession as in (135), but a condition as in (137). (cp the sentences in subsection 2.6.2)

(137) Akaúyá nhási hazvíchatiyámúra.

(If he comes today it will no longer help us.)

It is not clear to me at the moment why (133) and (134) should be well-formed, while (136) is not, yet they have undergone the same deletion rule.

2.6.4 kana (whether)

When kana carries the meaning "whether" it introduces an embedded question (see 2.5.2 above.). In such sentences kana is not optionally deletable as the ungrammaticality of (138) - (140) which correspond to (106) - (108) respectively indicate.

(138) *Ndinodá kuzívá makáma mombe kare.

(139) *Tichaóma Mberí achígóná kutámbá bhóra.

(140) *Shámwari yángu ichandiúdzá munhu uye ákadzoká.

2.7 Zva [+participial]

Zva appears to be one of the complementizer formatives in Shona. To this end consider the sentence in (141) below.

(141) Temba zvaáuya nhási kudái zvinoratidza kuti basa ákapédzá.

(Because Temba has come today it means that he finished the work.)

The string Témba zvaáúya nhási kudái seems to be a noun phrase complement. This string is the subject of the predicate zvinoratidza kuti basa ákapédzá. The zvi in zvinoratidza is dictated and controlled by this noun phrase complement. Up to now it would appear that I have only assumed without proving it that the string Témba zvaáúya nhási kudái is a noun phrase complement. In the first place, if the interrogative pro-form chii is substituted for this string in the sentence in (141) the result is the grammatical question

(142) Chii chinoratidza kuti basa ákapédzá?

(What indicates that he finished the work?)

to which the answer is Témba zvaáúya nhási kudái. As was seen in 1.2.1.2 the answer to a question with interrogative chii is a noun phrase. Secondly, the pseudo-cleaving of (141) yields (143) which is perfectly grammatical.

(143) Témba zvaáúya nhási kudái ndizvo zvinoratidza kuti basa ákapédzá.

(Tamba's arrival today is what indicates that he finished the work.)

The zvo in ndizvo is clearly a reflex of the prefix of class 8 which in this case is referring to the string Témba zvaáúya nhási kudái. Further examples of sentences of this type are given below. The noun phrase complements in question are underlined.

(144) Táyi zvarápera zvicháita kuti ndipinde muchikwéreti.

(Since this tyre is worn out I shall be forced to enter into a debt.)

(145) Zvawátora mari'yaké zvichakukónzera kútaura.

(Taking his money as you have done will lead you into a quarrel with him.)

(146) Murumé uyu zvaatevéra zvinorevá kuti anoda mukadzi wake.

(By tracing his wife this man has shown that he loves her.)

(147) Zvavakatenga gejo zvákavábátsirá kúrima.

(Buying the plough helped them to till their land.)

(148) Zvawava kúchovha makasa zvíchakurúnzirá kubá.

(Since you are now gambling for money you will be led into stealing.)

Each of these noun phrase complements is introduced by zva. This zva is then invariably attached to the verb of the clause which it serves to introduce. The verb which follows it is always in the participial mood. Thus zva [+participial] is another complementizer. The meaning carried by zva in this case is "since, as, because ---".

2.8 Deleted Complementizer Formatives

In Shona there are some sentences in which the complement clause is not introduced by an overt complementizer such as kuti or kana as was the case in the sentences which we have met so far in this chapter. In the sentences referred to presently the complement clause may be in the participial, indicative, subjunctive or consecutive mood. All these seem to be cases of verb phrase complements, not noun phrase complements.

Examples of sentences in which the complement clause is in the participial mood:

(149) Mungadái máenda kúmushá.

(You should have gone home.)

(150) Vanhu vakáramba vachitaura vanzi nyárárai namambo.

(The people kept on talking when they had been told to keep quiet by the chief.)

(151) Babá akadzamára ásvika zvesé zvékutambá zvápera.

(As soon as father arrives all playing has got to stop.)

(152) Tsitsi ndinógara ndichísangana naye kutsime.

(As for Tsitsi I always meet her at the well.)

(153) Jéke haáchafa ákazvílita zvákare zvékuba.

(Jack will never steal again.)

An example of a sentence in which the complement clause is in the indicative mood:

(154) Itá páshoma nepáshoma unodzámárá wawána zvaúri kudá́.

(Do it little by little; in the end you will get what you want.)

Examples with complement clauses in the subjunctive mood:

(155) Amái vakadákárá vádzoké kutsime Dambudzo ásatí ámuká.

(Mother returned from the well only to find Dambudzo still in bed.)

(156) Zúze ndíye asáká́ tsúro ipúnyúke.

(Zuze was the one who let the hare escape.)

An example with a complement clause in the consecutive mood:

(157) Midzi ákásímbirira akadákárá akawana fúndo yaaídá.

(Midzi persevered until he got the education he wanted.)

There are at least two possible ways of coping with the complement clauses in (149) - (157). One approach is to say that if these embedded clauses are introduced by any complementizers at all, then the complementizers in these sentences are: \emptyset [\bar{F} participial] for (149) - (153), \emptyset [\bar{F} indicative] for (154), \emptyset [\bar{F} subjunctive] for (155) - (156), and \emptyset [\bar{F} consecutive] for (157).

However it is also possible that diachronically there were overt complementizer formatives like kana, kuti and ku in these complementizers but that these were eroded in the course of time so that today only the mood with which they were associated remains. Since all these four moods have already appeared above with overt complementizer formatives one could postulate the following complementizers for these sentences:

kana [\bar{F} participial] for (149) - (153);

kuti [\bar{F} indicative] for (154);

kuti [\bar{F} subjunctive] for (155) - (156);

kana [+ consecutive] for (157).

As has already been stated these complementizers will form part of the strict subcategorization of the verbs after which they occur. Just as some verbs, for instance, are marked for optional object deletion, the verbs in question here will be marked for obligatory complementizer formative deletion.

If the latter suggestion proves to be viable, it is to be preferred to the former which seems to proliferate the number of complementizers to be found in Shona. Nevertheless more investigation is required before a more positive statement can be made in this connection. For the purpose at hand the latter approach is adopted.

2.9 Verb -ti (say) and Complementizers

Direct speech following on the verb -ti (say) - the only verb in Shona privileged to introduce a quotation - requires comment. Such a quotation is to be regarded as a direct object of some kind. Here is an example of such a sentence.

(158) Sara' átí, "Toko' uri' rómbe."

(Sara said, "Toko, you are stupid.")

Although the complement in this sentence is not introduced by an overt complementizer formative, this sentence differs from those in (149) - (157) in that the complement is a noun phrase complement. If this sentence is transformed into the passive, and extraposition applied subsequently, it will become apparent that the head noun of the quotation is a pronoun of class 8.

(159) Zvánzǐ naSara', "Toko', uri' rómbe."

(It was said by Sara, "Toko, you are stupid.")

Zv- is clearly a subject concord of class 8.

Notice that -ti may also be complemented by an ideophone.

(160) Vaná' vákatí' zǐi kunyárára zvakápínda mudzídzisi.

(The children became very quiet when the teacher came in.)

In this case however -ti does not seem to mean "say, speak", but rather something like "become".

Since the quotation which may occur after -ti may be in almost any of the moods, we cannot postulate, it seems, a complementizer formative like kuti or kana before it, because doing so would lead us to include among the complementizers such impossible complementizers as: kuti /+ imperative/, kana /+ indicative/ or kana /+ subjunctive/. In brief it would not be known in some cases which complementizer formative to postulate. In order to obviate this difficulty it is proposed here to set up tentatively a \emptyset complementizer which will form part of the strict subcategorization statement of -ti (say) only. This \emptyset complementizer will serve to introduce a quotation.

2.10 List of Complementizers

Among the complementizers which are found in Shona (Zezuru dialect) are the following:

<u>kuti</u> /+ indicative/	<u>kana/kuti</u> /+ participial/
<u>kuti</u> /+ subjunctive/	<u>kana</u> /+ consecutive/
<u>ku</u> /+ infinitive/	<u>zva</u> /+ participial/
\emptyset complementizer.	

Although words like kubvira, dakara, dzamara and a few others introduce subordinate clauses, they nevertheless do not seem to subcategorize verbs. For this reason one hesitates to regard them as complementizer formatives. They may be mere conjunctives. I have not included them among my complementizers because their status is not clear to me at the moment.

It is proposed to regard each complementizer as being made up of two parts, namely, the introducing element and the mood. A complement clause must be in one or another of the moods in Shona. The complementizer in any complement clause is governed by the verb in the higher

sentence. Another observation worth noting is that complementizers are mutually exclusive. If one is inserted in any one cycle none of the others may be inserted subsequently in that same cycle. All these complementizers may feature in noun phrase complements.

Owing to the fact that ku as well as kuti is a complementizer formative, there is need to restate how the choice between the concords ku of class 15 and zvi of class 8 is determined. This could be done in the following way: with ku as complementizer formative there is a relatively free choice between the concords of class 8 and class 15, except that, if the complement clause has -ti as its verb, the concord employed is restricted to that of class 8. However there is a tendency on the whole to prefer the concord of class 15 to that of class 8. With the other complementizer formatives only the concord of class 8 may be selected.

2.11 kuti /+ subjunctive/ and ku /+ infinitive/

The setting up of kuti /+ subjunctive/ as well as ku /+ infin./ as complementizers appears to help to account for yet another intriguing phenomenon with respect to the kuti clauses. For instance, consider the following pairs of sentences:

(161)a. Koni'áida'kúti ádzoké.

(Koni wanted to come back.)

b. Koni'áida'kudzoka.

(Koni wanted to come back.)

(162)a. Koni'áida'kúti Farái ádzoké.

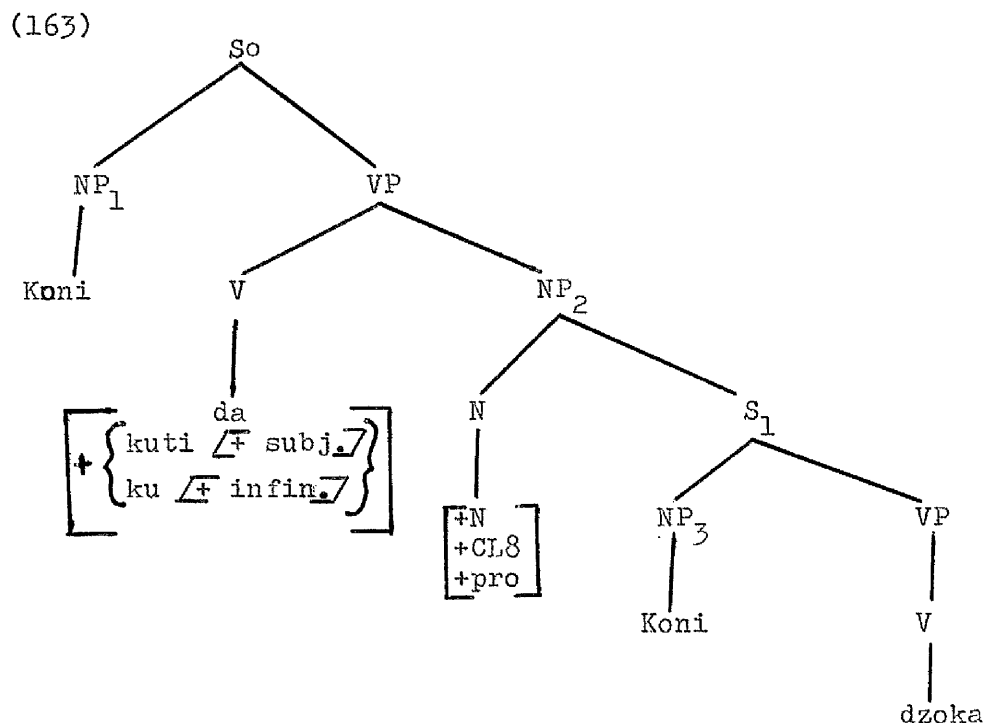
(Koni wanted Farai to come back.)

b. *Koni'áida'Farái kudzoka.

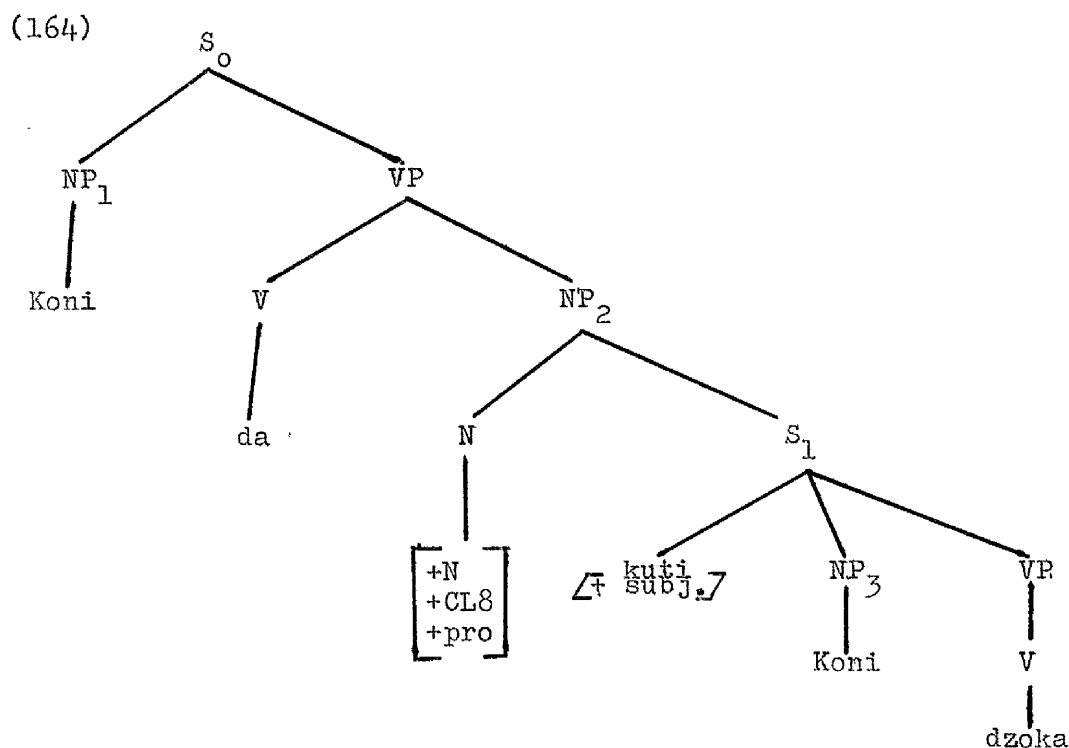
(Koni wanted Farai to come back.)

The two sentences in (161) share the same meaning and they seem to be related structurally also. That is, it would appear that (161b) is derivable from the same structure which underlies (161a). But in the

other pair only (162a) is well-formed, the other is not, yet it is constructed on the pattern as (161b). How is this discrepancy to be accounted for? Taking the underlying structure of (161a) and (161b) to be as in (163)

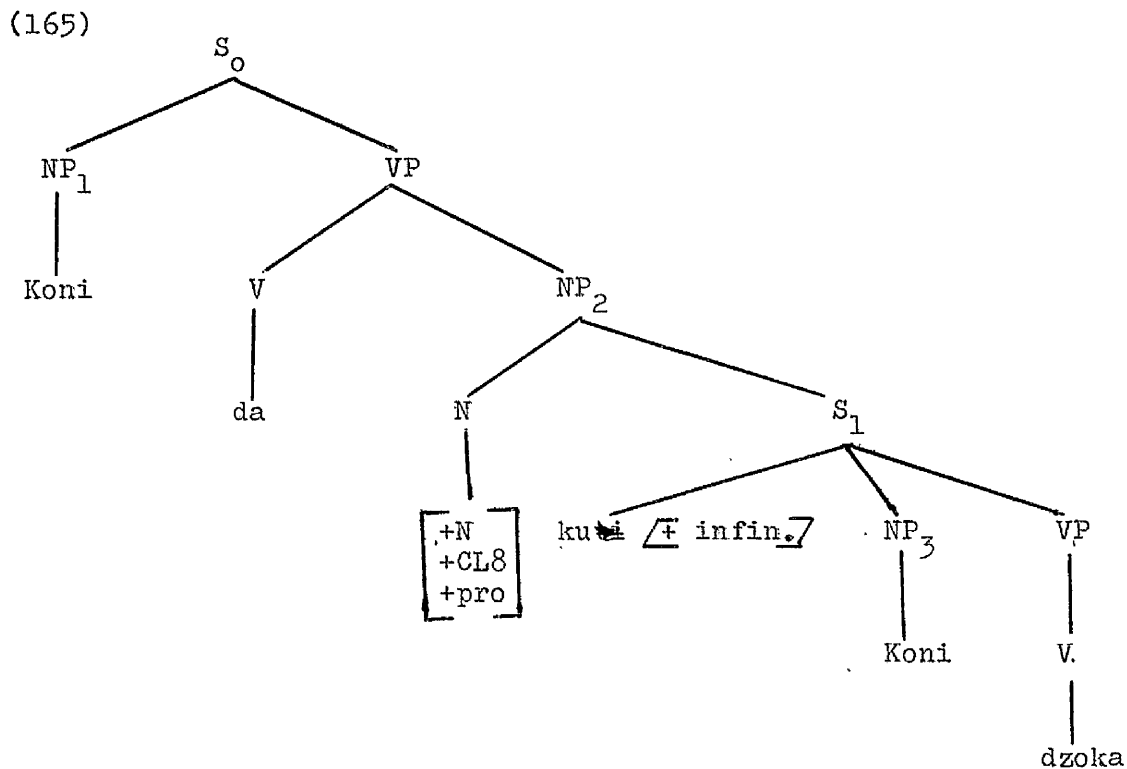


it would appear that (161a) is derived by inserting kuti [subj.] into S_1 . This yields the structure in (164).



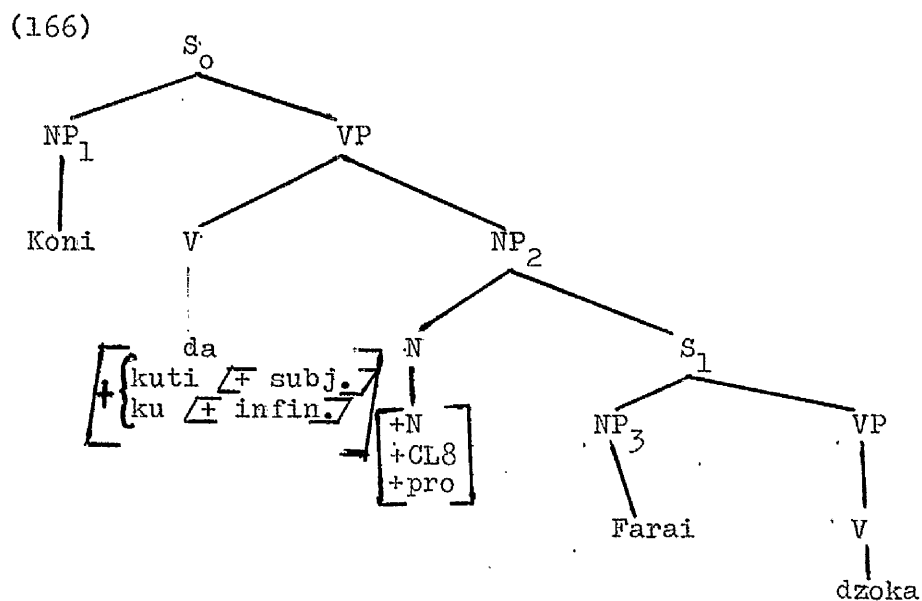
Applying the other rules which are not relevant to the discussion at hand we end up with (161a).

If to the structure in (163) we choose to insert ku $\angle + \text{infin.} \angle$ instead, we get the structure in (165) below.

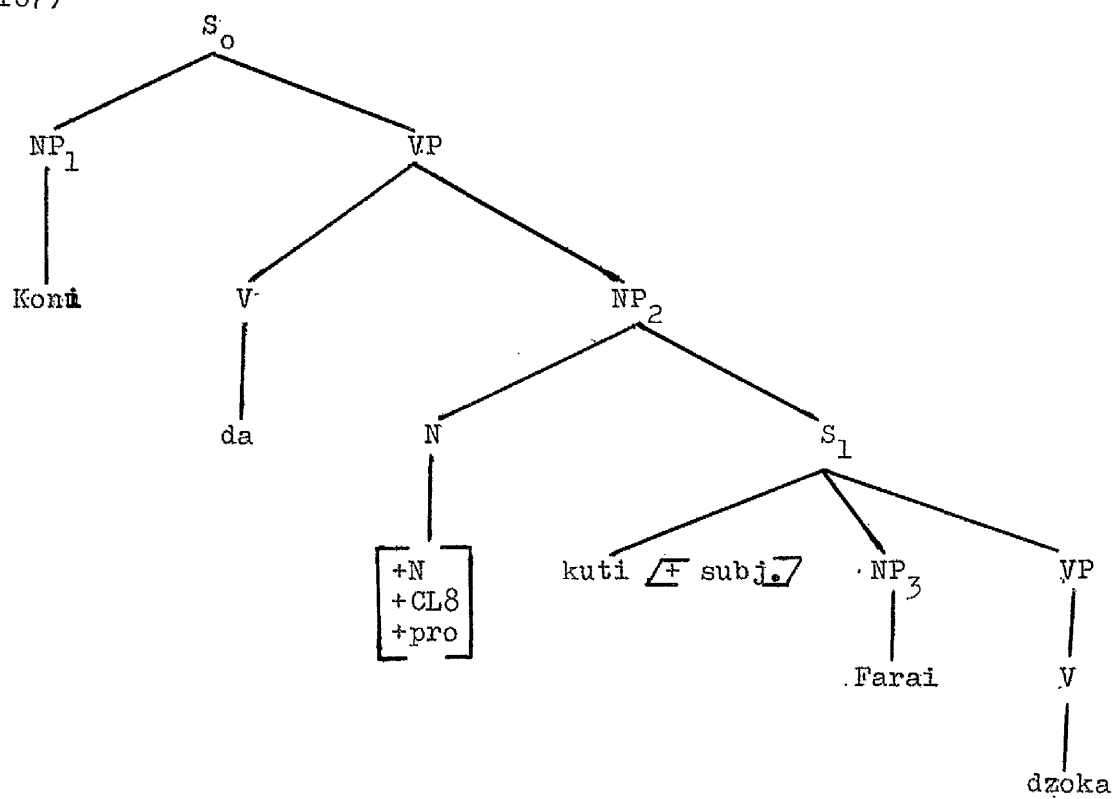


From this structure (161b) is finally derived. Notice that in both (164) and (165) Equi-NP deletion has to apply.

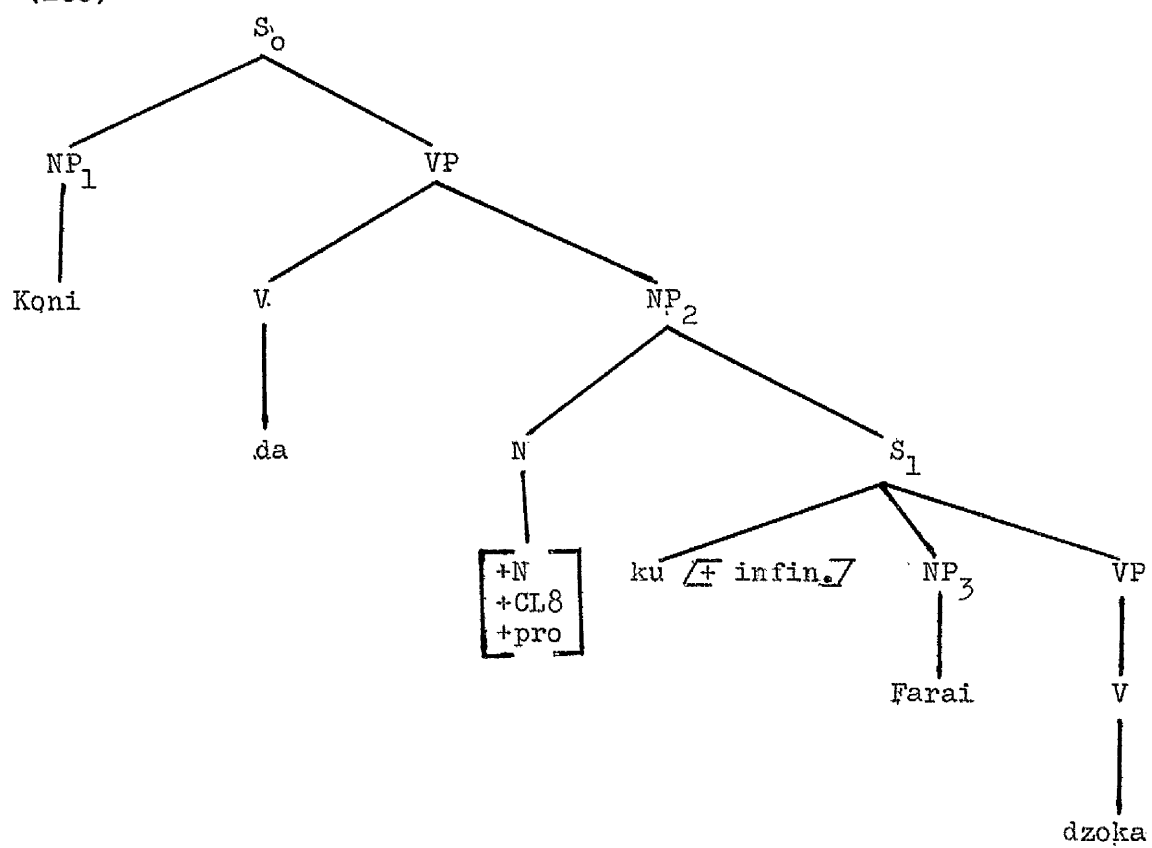
The underlying structure of (162a) and (162b) is much similar to that of (161). It is given in (166) below.



(167)



(168)



Inserting kuti $\left[\begin{smallmatrix} + \\ \text{subjunctive} \end{smallmatrix} \right]$ as before into S_1 the result is the structure in (167). From this tree is eventually obtained (162a). Notice that there is no Equi-NP deletion applying in this case. Now if instead of kuti $\left[\begin{smallmatrix} + \\ \text{subjunctive} \end{smallmatrix} \right]$ we insert ku $\left[\begin{smallmatrix} + \\ \text{infinitive} \end{smallmatrix} \right]$ into S_1 in (166) the configuration we get is (168). From this derived phrase marker is eventually obtained the ungrammatical sentence (162b). What all this means is that ku $\left[\begin{smallmatrix} + \\ \text{infinitive} \end{smallmatrix} \right]$ cannot be inserted into a structure like that in (166). But the question is: why does this transformation block in this case? This cannot be attributed to the verb in the higher S because in (165) the same verb -da' with the same meaning permits ku $\left[\begin{smallmatrix} + \\ \text{infinitive} \end{smallmatrix} \right]$ to be inserted into the complement clause. Notice that apart from the fact that the subject noun phrase of S_1 in (163) is Koni' and that of S_1 in (166) is Farai' these two tree diagrams are identical. In (165) NP_3 is deleted under identity with NP_1 , but in (168) this is not possible. So the ungrammaticality of (162b) appears to stem from the fact that there is an identity constraint which accompanies ku $\left[\begin{smallmatrix} + \\ \text{infinitive} \end{smallmatrix} \right]$ insertion. Perhaps this may be stated as a condition on Equi-NP deletion, but at the moment I do not know how that condition could be formulated. The subject noun phrase of the complement clause must be identical to either the subject noun phrase or the object noun phrase of the containing S . The sentences in (169) and (170) are further illustrative examples of the type of sentences in (161) and (162) respectively.

(169)a.i. Mwana' ábvúma kuti ásaré here'?

ii. Mwana' ábvúma kusará here'?

(Has the child agreed to remain behind?)

b.i. Ndakaédza kuti ndímubátsiré asi' zvakákóna.

ii. Ndakaédza kumubátsirá asi' zvakákóna.

(I tried to help him but it was all in vain.)

c.i. Mbombo' ákaédzesera kuti árové nyóká ikabva yamusvipirá.

ii. Mbombo' ákaédzesera kurová nyóká ikabva yamusvipirá.

(As Mbombo tried to hit the snake it spat at him.)

d.i. Muri' kufungidzira kuti mudzoke rinhi?

ii. Muri' kufungidzira kudzoka rinhi?

(When are you expecting to come back?)

e.i. Mudzidzisi akanganwa kuti aridze dare.

ii. Mudzidzisi akanganwa kuridza dare.

(The teacher forgot to ring the bell.)

f.i. Vasekuru vabvumidza Kembo kuti aende kumba.

ii. Vasekuru vabvumidza Kembo kuenda kumba.

(Grandfather allowed Kembo to go home.)

(170)a.i. Wanatsa kuti vana vaende kuchiri kuchena.

xxx (You did well to allow the children to go when it was still daylight.)

ii. *Wanatsa vana kuenda kuchiri kuchena.

b.i. Tomu akaedza kuti motokari yake ifambe.

(Tom tried to make his car move.)

ii. *Tomu akaedza motokari yake kufamba.

c.i. Anyangadza kuti vatezvara vagare pasi.

(He made a mistake in letting his father-in-law sit on the ground.)

ii. *Anyangadza vatezvara kugara pasi.

d.i. Sani akaramba kuti amai vake vatambudzike.

(Sani could not tolerate seeing his mother suffer.)

ii. *Sani akaramba amai vake kutambudzika.

e.i. Suzi abvuma kuti Masango amutakure nemota yake.

(Suzi agreed that Masango should give her a lift in his car.)

ii. *Suzi abvuma Masango kumutakura nemota yake.

In the case of (170e) if the complement clause Masango amutakure nemota yake is passivized we get (171).

(171) Suzi' ábvúma kuti átakurwe naMasángo' némóta yáke'.

(Suzi agreed to be given a lift by Masango in his car.)

Now that the grammatical subject of this complement clause is identical with that of the containing S, ku / \bar{F} infinitive/ insertion can apply without causing any difficulty. The resulting sentence is (172) below which is perfectly well-formed.

(172) Suzi' ábvúma kutakurwa naMasángo' némóta yáke'.

(Suzi agreed to be given a lift by Masango in his car.)

2.12 kuti / \bar{F} indicative/ and ku / \bar{F} infinitive/

The discussion immediately above involved the insertion of kuti / \bar{F} subjunctive/ and ku / \bar{F} infinitive/ into the complement clause and the relationship, both structural and semantic, of the sentences which result. A similar comparison obtains between kuti / \bar{F} indicative/ and ku / \bar{F} infinitive/. To this end consider the following sets of sentences.

(173)a. Mwoyo ákaóná kúti ákatádza'.

(Mwoyo realized that he made a mistake.)

b. Mwoyo ákaóná kutádza kwáke'.

(Mwoyo saw his mistake.)

c. *Mwoyo ákaóná kutádza'.

(*Mwoyo saw erring.)

(174)a. Zíkomu ákafémbérá kúti Mushongá ánosvika nhási, íye achíbva' ásvikáwo nhási.

(Zikomu guessed that Mushonga would arrive today, and for sure he arrived today.)

b. Zíkomu ákafémbérá kúsvika kwaMúshongá nhási, íye achíbva' ásvikáwo nhási.

(Zikomu foretold Mushonga's arrival today, and indeed he did arrive today.)

c. *Zíkomu ákafémbérá Mushongá kúsvika nhási, íye achíbva'

ásvikáwo nhási.

(*Zikomu foretold Mushonga to arrive today, and for certain he arrived today.)

The (a) and (b) sentences share the same meaning in each set. Observe that (173c) and (174c) which are identical to (173b) and (174b) except in one respect only, namely, the absence of the possessive kwáke and kwaMushonga respectively, are ill-formed. That the (a) and (b) sentences in each set are related somehow structurally as well as semantically seems obvious enough, and a linguistic description of Shona which does not capture this relatedness would be, to my mind, descriptively inadequate.

What is interesting to observe here is that when ku [+infin.] is inserted into complement structures governed by verbs like -óná and -fémberá the subject of the complement clause is not deleted by Equi-NP as was the case in the subsection immediately above, but is turned into a possessive construction. In this case there is no identity constraint in respect of the insertion of ku [+infinite] as was the case in the preceding subsection, hence (173b) is well-formed and so is (174b). Here are further examples of the sentences in which ku [+infinite] insertion is accompanied by possessivization.

(175)a. Midzi árí kutsútsumwá kúti nyayá iyi yákabúdá páchena.

(Midzi is unhappy because this affair became known.)

b. Midzi árí kutsútsumwá kubúdá páchena kwényayá iyi.

(Midzi is unhappy because this affair became known.)

c. *Midzi árí kutsútsumwá nyayá iyi kubúdá páchena.

(*Midzi is unhappy this affair to come into the open.)

(176)a. Ndaúdza Nzira kuti zvinhu zvaípa.

(I told Nzira that things were bad.)

b. Ndaúdza Nzira kuípa kwezvinhu.

(I told Nzira that things were bad.)

c. *Ndaúda Nzira zvinhu kuípa.

(*I told Nzira things to be bad.)

(177)a. Totama áivánzá kúti áne mwoyo wakaípa.

b. Totama áivánzá kuvé kwáké nemwoyo wakaípa.

(Totama used to hide his cruelty.)

c. *Totama áivánzá kuvé nemwoyo wakaípa.

(*Totama used to hide cruelty.)

In some cases however possessivization accompanying ku [F infinitive] insertion seems to be optional as in (178) - (180).

(178)a. Mwaná ánotónderá kúti ákanzi' naamái váké áuyé mangwana.

b. Mwaná ánotónderá kúnzi kwáké naamái váké áuyé mangwana.

c. Mwaná ánotónderá kúnzi naamái váké áuyé mangwana.

(The child remembers having been told by its mother to come tomorrow.)

(179)a. Ákaróhwá akatsiidza kuti haáchazviíta zvakáre.

b. Ákaróhwá akatsiidza kusazviíta kwáké zvakáre.

c. Ákaróhwá akatsiidza kusazviíta zvakáre.

(He was beaten so hard that he promised not to do it again.)

The problems which I leave as open questions are (a) how this possessive construction is to be characterized, and (b) when is this possessivization obligatory and when is it optional?

2.13 Summary

The facts which have emerged so far in this chapter are (a) that complementizers exist in Shona and these are listed in subsection 2.10 above, (b) that the ku in kuti clauses dominated by NP is not a noun prefix but a complementizer formative whose phonological form happens to be identical to that of the noun prefix of the head noun of the NP in which it occurs, (c) that there exists a complementizer formative kuti as well as kuti an infinitive form of the verb -ti, and (d) that complement clauses which are dominated by NP may have as their

head noun a pronoun of class 8 or class 15 normally. (I say "normally" because there is a departure from this in a few cases as will be seen in 6.1.5.)

3.0

INFINITIVAL AND DERIVED NOMINALS

There are various types of nominal expressions which are found in Shona. In this chapter I should like to consider two of them which are of special significance to this study. Let us call them infinitival and derived nominals. To this end examine the following sentences:

(1)a. Madzitatéguru édu' aipfeka nhembé'.

(Our forefathers used to wear skin aprons.)

b. Ndapá' váchatí mari'.

(I gave the bride and bridegroom some money.)

c. Tendere ákafa'.

(Tendere died.)

d. Vana' vanoenda kumushá' mangwana'.

(The children will go home tomorrow.)

(2)a. kupfeka nhembé' kwamadzitatéguru édu'

(the dressing in skin aprons of our forefathers)

b. kupá' kwangu vachati mari'.

(my giving the bride and bridegroom some money)

c. kufa' kwaTendere

(Tendere's death)

d. kuenda kwevana' kumushá' mangwana'

(the children's departure for home tomorrow)

(3)a. zvipeko zvenhembé' zvamadzitatéguru édu'

(clothing - of skin aprons - of forefathers - our =
the clothing which consisted of skin aprons which our
forefathers had)

b. chipó' changu chemari' kuvachati

(gift - my - of money - to the bride and bridegroom =
my gift to the bride and bridegroom which was in the form
of money)

c. rufu' rwaTendere

(Tendere's death)

d. rwendo rwekúmuśhá' rwamángwana rwávaná'

(journey - of home - of tomorrow - of children =
the children's journey home tomorrow)

Corresponding to the sentences in (1) are the infinitival nominals in (2) and the derived nominals in (3). There are many differences which have been noted between these two types of nominals in Shona linguistic studies. The differences that would strike one's attention most are those that pertain to the productivity of the transformation in question, the generality of the relationship between the nominal and the associated underlying structure, and the morphological structure of the nominal.

The constructions which are being discussed here have their approximate counterparts in English in the form of gerundives and derived nominals. But since infinitival nominals are not always equivalent to the gerundives in English this term has accordingly been avoided as it might be misleading in Shona. Chomsky discussed these gerundives and derived nominals at some length.¹ In his discussion of these two types of nominal phrases he considers two positions, namely, what he labelled the "lexicalist position" and the "transformationalist position". In his conclusion he adopts the lexicalist position for the derived nominals and the transformationalist position for the gerundive nominals. Chomsky's conclusions here appear to be equally applicable to Shona in respect of the nominals which are under discussion. It seems to be the case that we shall achieve a large measure of descriptive adequacy if we adopt the transformationalist position for infinitival nominals and the lexicalist position for the derived nominals.

1. N.Chomsky in "Remarks on Nominalization" in Readings in English Transformational Grammar, Roderick A. Jacobs and Peter S. Rosenbaum (editors). (1970)

3.1 Productivity

Consider first the question of productivity. One thing which we notice clearly is that we can form infinitival nominals relatively freely from underlying structures of the form noun phrase plus verb phrase. In fact there are very few exceptions indeed to this transformation. An example of such exceptions is a proposition in which the verb is -fanirá (ought to). However as far as the formation of derived nominals is concerned there are many restrictions. The structures which underlie the sentences in (4), for instance, are easily transformed into infinitival nominals of (5), but not into the derived nominals of (6).

(4)a. Murúmé' uye ákátárisa rutivi.

(That man looked sideways.)

b. Musíkáná' anyora tsamba.

(The girl wrote a letter.)

c. ndége' inobhururuka mudénga.

(An aeroplane flies in the sky.)

(5)a. kutarisa rutivi kwémurúmé' uye

(that man's looking sideways)

b. kunyórá' tsámá kwémusíkáná'

(the girl's writing of the letter)

c. kubhururuka mudénga kwéndege

(the aeroplane's flying in the sky)

(6)a. { *mutariso (3) rutivi wémurúmé' uye
 *chitariso (7) rutivi chémurúmé' uye
 *----- (other classes)

b. { *munyóró' (3) tsámá yémusíkáná'
 *nyóró' (5) tsámá rémusíkáná'

c. { *mabhururuko (6) mudénga éndege
 *chibhururuko (7) mudénga chéndegee
 *----- (other noun classes) dege
 { *----- (other noun classes)

Whereas the structures which underlie both the sentences in (1) and those in (4) can have the transformational rules which yield infinitival nominals applied to them, only those in (1) can be transformed into derived nominals. It seems quite clear that the transformation which gives rise to infinitival nominals is much more productive than that which would yield derived nominals were we to allow such a transformation in respect of derived nominals. There does not appear to be any rule by which we can predict the grammaticality of the phrases in (3) and the ungrammaticality of those in (6). Even where a proposition can be transformed into a derived nominal, on the whole there does not seem to be a way of predicting which noun class feature the derived nominal is going to have. The derived nominals in (3) clearly illustrate this point. The nominal zvipeko in (3a) has class 8 feature but the nominal rufu in (3c) has a class 11 feature. If we assign a class 11 feature to the proposition underlying (3a) we come up with the ungrammatical nominal phrase in (7).

(7) *rupfeko rwénhembé' rwemádzitatéguru édu'

Similarly if we assign a noun class 8 feature to the proposition which underlies (3c) or (3d) the result are the ill-formed phrases in (8).

(8)a. *zvifu' zvaTéndere

b. *zvendo zvekúrushá' zvamángwana zvévaná'

There are nevertheless a few cases where a noun class feature can be assigned to a derived nominal in a way which is more or less predictable. Such are the agentive derived nominals in (9) and the abstract derived nominals in (10).

(9)a.i. murimi (1) (a farmer)

ii. varimi (2) (farmers)

b.i. muvhimi (1) (a hunter)

ii. vavhimi (2) (hunters)

c.i. mutóngi (1) (a judge)

ii. vatóngi (2) (judges)

cp -rima (plough)

cp -v'hima' (hunt)

cp -tóngá (judge, try)

d.i. mudzi'dzisi (1) (a teacher)	cp -dzi'dzisa (teach)
ii. vadi'dzisi (2) (teachers)	
e.i. murwi (1) (a soldier)	cp -rwa (fight)
ii. varwi (2) (soldiers)	
(10)a. uroyi (14) (witchcraft, wizardry)	cp -roya (bewitch)
b. ugare' (14) (peacefulness)	cp -gara (sit, settle)
c. urwére' (14) (an illness)	cp -rwará' (be ill)
d. upfumi' (14) (richness)	cp -pfuma' (be rich)
e. uipi' (14) (evil, badness)	cp -ipa' (be bad)
f. ufuro (14) (grazing area)	cp -fura (graze)
g. ungwarú' (14) (cleverness)	cp -ngwara (be clever)
h. uremú' (14) (weight)	cp -rema (be heavy)

But even then one does not go very far down any given list of verbs before one comes across counter-examples. The examples in (11) and (12) counter those in (9) and (10) respectively.

(11)a.i. *muendi (1) (a goer)	cp -enda (go)
ii. *vaendi (2) (goers)	
b.i. *mumuki (1) (one who wakes up)	cp -muka (wake up)
ii. *vamuki (2) (those who wake up)	
c.i. *muremi (1) (*one who weighs)	cp -rema (be heavy)
ii. *varemi (2) (*those who weigh)	
d.i. *mukwani' (1) (*one who is enough)	cp -kwaná' (be enough)
ii. *vakwani' (2) (*those who are enough)	

(12)a. *uendi (14)	
*uendo (14)	
*uenda (14)	cp -enda (go)
*uendu (14)	
*uende (14)	

b. *utarisa (14)

*utarise (14)

cp -tarisa (see, look)

*utariso (14)

*utarisu (14)

c. *umírí' (14)

cp -mírá' (stand, stop)

Furthermore in (10), for instance, the terminal vowel may be /a/ as in uróóra, /e/ as in ugaré, /i/ as in upfúmí, /o/ as in ufuro, or /u/ as in ungwarú. There does not seem to be a way of predicting in these nominals what the terminal vowel is going to be. If in (10a) the terminal vowel /a/ is altered to /e/ or /o/ or /u/ we get the forms *uróóre, *uróoro and *uróoru which are all ill-formed. In (12c), on the other hand, if the terminal vowel is changed to /o/ we get the well-formed derived nominal umíró (height; size). It could be argued that derived nominals of class 14 are themselves derivatives from derived nominals of other classes, notably classes 1 and 2. But the existence of such counter-examples as the following appears to weaken the argument.

(13)a. *uvéngí' (14)

cp muvéngí' (1) (enemy)

b. *ubí' (14)

cp mubí' (1) (one who steals)

c. *udzídzí' (14)

cp vadzídzí' (2) (learners)

It is clear that if these derived nominals are going to be obtained transformationally a very complicated transformational apparatus will be required and it is doubtful whether this can be achieved without making the grammar look cumbersome and unwieldy.

3.2 Meaning

The second major difference between these two kinds of nominals relates to the semantically idiosyncratic nature of the relationship between the derived nominal and the associated verb. Often derived nominals bear individual shades of meaning which sometimes differ considerably from the verb from which they are said to derive. The following illustrative examples will bear this out.

- (14)a.i. mуро́о́ра (1) (a daughter-in-law)
 ii. ро́о́ра (5) (bride price)
 iii. чи́роо́ра (7) (behaviour of a daughter-in-law)
- b.i. де́мо (5) (an axe)
 ii. ма́темо (6) (axes)
 iii. нхе́мо (9/10) (a chisel/chisels)
- c.i. му́сунго (3) (a string)
 ii. чи́сунго (7) (a bond, a resolution)
- d.i. га́ро (5) (a base; butt)
 ii. му́гари (1) (a resident)
 iii. чи́гаро (7) (a chair)
 iv. ру́га́ре (11) (peace)
 v. у́га́ре (14) (peacefulness)
- cp -ро́о́ра (marry (with a male as subject in an active sentence))
 cp -те́ма (cut)
 cp -су́нга (tie)
 cp -га́ра (sit; settle)

Although there are a few subregularities, for example in (9) above, on the whole however the range of variation in meaning is typical of lexical structure. If it is accepted that it is the grammatical relationships in deep structure which determine the meaning of a sentence, it follows that in order to account, within the transformational approach, for the facts which have been mentioned above it would be necessary to resort to the device of specifying a range of meanings for the base form. It would have to be stated also that with certain semantic features a form must nominalise but with others it must not. The grammar that is suggested by this artifice will be ad hoc.

3.3 Internal Structure

Another observation which strikes one is the difference between derived nominals and infinitival nominals with regard to their internal structure. A derived nominal may have as one of its features a noun class affix of almost any class. Locative affixes are however

excluded ^{from} ~~in~~ this case unless they are super~~imposed~~ on other affixes. Morphologically a typical noun in Shona consists of a class affix and a stem as is illustrated in (15) below.

- (15)a. mu-rúmé' (1) (a man)
 b. mi-kúyu (4) (fig-trees)
 c. ma-kúyu (6) (figs)
 d. chi-ngwa (7) (bread)
 e. pa-nzé' (16) (outside (near by))
 f. ku-nzé' (17) (outside (in general))

Some derived nominals have a morphological structure which consists of a class affix, a verb root and a terminal vowel, the latter being determined to some extent by the class affix. Such are the nominals in (16).

- (16)a. mu-tádž-i' (1) (a sinner) cp -tádžá' (sin; fail)
 b. ru-tádž-o' (11) (a sin)
 c. mu-súng-o' (3) (a string) cp -súngá' (tie)
 d. chi-súng-o' (7) (a bond)
 e. rw-end-o (11) (a journey) cp -enda (go)
 f. va-róór-a (2) (daughters-in-law) cp -róórá' (marry)

There are subregularities that may be observed here as was mentioned earlier. For instance, the affixes mu- and va- of noun classes 1 and 2 respectively normally require that the unextended verb should have the terminal vowel /i/ as in (16a) and also in (9). The kind of derived nominals in (16) may not be expanded to include either object noun phrases or adverbials although the verbs themselves may occur with one verbal extension or more as illustrated in (17).

- (17)a. mu-súng-w-a (1) (a captive) cp -súngá' (tie)
 b. chi-zvár-ír-w-o (7) (since birth) cp -zvárá' (beget)
 c. ma-bik-ír-ó (6) (manner of cooking) cp -bika (cook)
 d. zvi-sak-is-o (8) (causes) cp -saka (cause)

It is however also possible to have a derived nominal whose morpho-

logical structure comprises a class affix and a verb phrase. In this case the terminal vowel is almost invariably limited to /a/. These nominals seem to share the meaning of relative clauses. Here are a few examples of such nominals.

- (18)a. mu-tám-b-a' nengwé' (1a) (one who plays with a leopard)
 cp -tám-bá nengwé' (play with a leopard)
- b. mu-kóm-b-a' choto' (1a) (one fond of warming oneself by the fireplace)
 cp -kóm-bá choto' (encircle a fireplace)
- c. chi-nzvéng-a' mutsváiro' (7) (one who godges the broom = a lazy person)
 cp -nzvéngá mutsváiro' (dodge the broom)
- d. chi-muts-a mapfíhwa' (7) (one who revives the hearth-stones = wife given to widower to replace the one who has died)
 cp -mutsa mapfíhwa' (raise the hearth-stones)

In (18b - d) the verb phrases consist each of a verb and a direct object noun phrase.

The infinitival nominals resemble in their morphological form the nominals in (18). That is, they always consist of the ku formative and a verb phrase as shown in the underlined strings in (19).

- (19)a. Mufudzi ánogona kuti mombe dziúye' masikati'. (see (49c.i) in Chapter 2)
- b. Máko áno dá kufám-bá névasíkana'. (see (51a) in Chapter 2)

This ku formative however as was seen earlier is not a class affix as such but a complementizer formative. Although the nominals in (18) and (19) both contain verb phrases, they nevertheless differ remarkably in other respects. The infinitival nominals are capable of much greater complexity than the derived nominals. This complexity is in the direction of that which is found in sentences. Thus the following transformations, which normally operate in sentences, may apply readily within infinitival nominals.

(20)a. anaphoric pronominalization;

e.g. i. Jójo ánodá kuténgá mabhúku aya.

(George wants to buy these books.)

ii. Jójo ánodá kúaténgá (namely mabhúku aya)

(George wants to buy them (namely, these books))

b. reflexive pronominalization;

e.g. i. *Mbare ákárámba kupirá Mbare kúvavéngi vake.

(*Mbare refused to give up Mbare to his enemies.)

ii. Mbare ákárámba kuzvipira kúvavéngi vake.

(Mbare refused to give himself up to his enemies.)

c. negation;

e.g. i. Mbare ábvuma kuendako.

(Mbare has agreed to go there.)

ii. Mbare ábvuma kusaendako.

(Mbare has agreed not to go there.)

d. pseudo-cleaving;

e.g. Mabhúku aya Jójo ndiwo aánodá kuténgá. (cp (20a.i))

(These books are the ones which George wants to buy.)

e. interrogative pro-form;

e.g. Jójo ánodá kuténgá chii? (reply: mabhúku aya)

(What does George want to buy?) (reply: these books)

Furthermore these infinitival nominals can contain aspect as in (21).

(21) Apédza kukángá nyáma Muchanéta ákatángá kuchíbika sadza.

(When Muchaneta had finished frying the meat she began to cook sadza.)

An infinitival nominal which is in a subject position in a sentence can still undergo any of the transformations listed in (20) as the sentences in (22) show.

(22)a. anaphoric pronominalization;

e.g. Kumuona zvinonetsa.

(It is difficult to see him.)

b. reflexive pronominalization;

e.g. Kuzvisungirira zvakaipa.

(Hanging oneself is bad.)

c. negation;

e.g. Kusabvakachirana nehama hazvina kuna.

(It is not a good thing to keep away from one's relations.)

d. pseudo-cleaving;

e.g. Jerusarema ndiro rinonakidza kutamba.

(It is the Jerusarema dance which is interesting.)

cp. Kutamba Jerusarema kunonakidza.

(The Jerusarema dance is interesting.)

Anaphoric pronominalization has been attested in derived nominals whose morphological composition is as follows:

class affix + verb + applied extension² + /o/.

This is exemplified in (23) below.

(23)a.i. Mabairo' acho mombe iyi ane ngozi.

(Slaughtering this cow is dangerous.)

ii. Maibairo' acho ane ngozi.

(Slaughtering it is dangerous.)

b.i. Maoneró' acho musikana iyeye anonetsa.

(Seeing that girl is difficult.)

ii. Mamuoneró' acho anonetsa.

2. For the approach adopted in this study in respect of the Applied extension see 6.1.4 and also Appendix A. For other treatments of this extension see N.C.Dembetembe in Verbal Constructions in Korekore, an M.Phil. Dissertation, London, (1969); also G.Fortune in Shona Grammatical Constructions, Part I, (forthcoming).

(Seeing her is difficult.)

c.i. Matakuríró ácho mángo dzácho ndiwo andísíngazíve.

(How to carry the mangoes is what I do not know.)

ii. Madzítákuríró ácho ndiwo andísíngazíve.

(How to carry them is what I do not know.)

The class affix of the derived nominal in this case appears to be restricted to that of class 6. There exists also an isolated example of a derived nominal with a negative formative.

misíkanzwa' (4) } (mischief; disobedience) cp -nzwa' (obey)
misakanzwa' (4) }

Apart from these examples which are rather rare we do not on the whole observe the transformations in (20) with derived nominals. These transformations block if applied to the structures underlying the nominals in (16) through (18). In the following sentence the nominal in (18b) appears as a direct object noun phrase.

(24) Gárwe áona mukómbá-choto'.

(Garwe has seen the one who is fond of sitting by the fireplace.)

If, for instance, we apply anaphoric pronominalization, the negative and the pseudo-cleaving transformations to the structure underlying (24), we eventually get the following sentences in (25) which are however all ungrammatical.

(25)a. anaphoric pronominalization;

*Gárwe áona muchíkomba.

(Garwe has seen the one who is fond of sitting by it.)

b. negation;

*Gárwe áona musakómbá choto'.

(Garwe has seen the one who is not fond of sitting by the fireplace.)

c. pseudo-cleaving;

*Garwe, choto' ndicho chaa'ona mukomba'.

(*The fireplace is what Garwe has seen the one who encircles)

Let us consider further the following sentences:

(26)a. Taka' haadi' rova-mbira.

(Taka does not want a rock-mamba.)

b. Musikaná' anofarira' muda-vanhu.

(The girl is happy to see the one who loves people.)

c. Tinotanga' munzvenga-dare.

(We start with the one who stays away from the dare.³)

(27)a. Taka' haadi' kurova mbira.

(Taka does not want to kill rock rabbits.)

b. Musikaná' anofarira' kuda vanhu.

(The girl enjoys loving people.)

c. Tinotanga' kunzvenga dare.

(We start by avoiding the dare.)

(28)a. *Mbira hadzidi' rohwa naTaka'.

(*Rock rabbits do not want be killed by Taka.)

b. *Vanhu vanofarira' mudiwa nemusikaná.

(*People are happy the one who is loved by the girl.)

c. *Dare rinotanga' munzvengwa nesu.

(*Dare begins the one avoided by us.)

(29)a. Mbira hadzidi' kurohwa naTaka'.

(Rock rabbits do not want to be killed by Taka.)

b. Vanhu vanofarira' kudiwa nemusikaná.

(People like to be loved by the girl.)

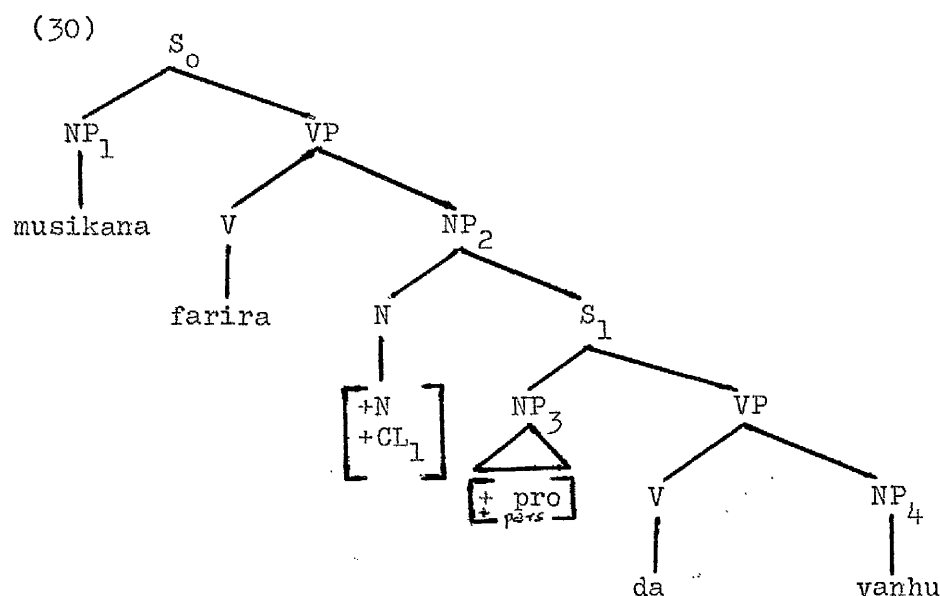
c. Dare rinotanga' kunzvengwa nesu.

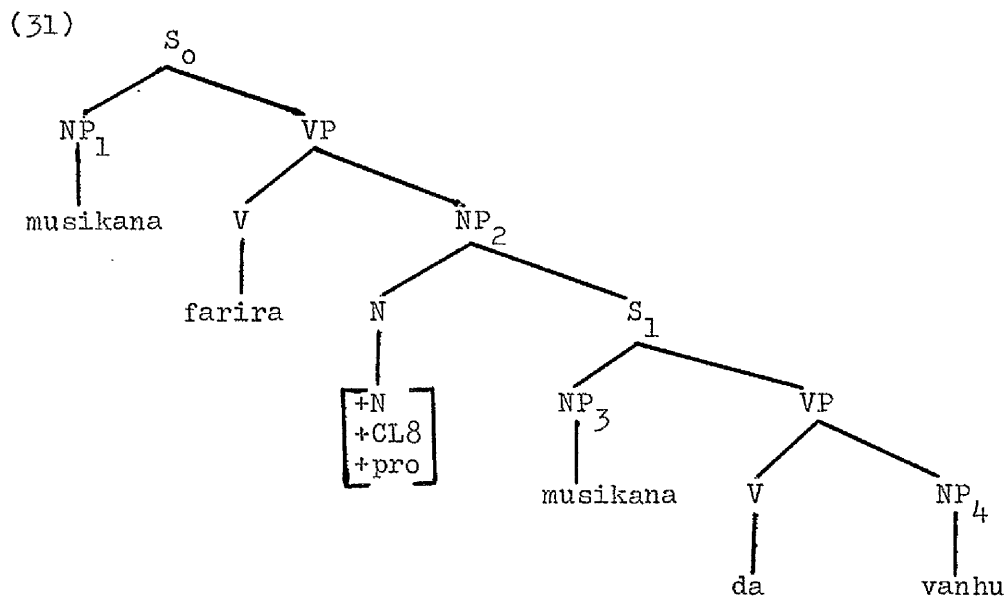
(The dare will be avoided by us first.)

3. A dare is a meeting place for men living in the same village. They have their meals there.

The strings which are underlined in (26) and (27) are derived nominals and infinitival nominals respectively. Both types of nominal are functioning as direct object noun phrases. All these nominals contain verb phrases each of which consists of a verb and a direct object noun phrase. But notice that whereas the infinitival nominals in (27) can undergo the passive transformation as shown in (29), the derived nominals in (26) cannot as (28) shows. The derived nominals in (26) form tight constructions whose morphology and word order cannot be disturbed without destroying the nominal. Infinitival nominals on the other hand are flexible. Some of their constituents can move around outside the nominal itself. For instance, in (29a) mbíra has moved outside the infinitive kuróhwa. In fact in (29a) the infinitive nominal is now kuróhwa' naTaka.

Although, for example, (26b) and (27b) look superficially similar in their linear structure, their derivation is remarkably different. Assuming for argument's sake that these two sentences have a similar underlying structure their deep structure representation would be as in (30) and (31) respectively.





In (31) after ku $\overline{[+ \text{ infinitive}]}$ has been inserted into S_1 , NP_3 can be deleted under identity with NP_1 . Then applying the other rules which are not essential to this discussion the result will be the sentence in (27b). But in (30) there is a problem in trying to derive the nominal muda-vanhu transformationally. To begin with our intuition tells us that the subject noun phrase of S_1 cannot be musikana because she is not the one who loves the people. She is only being charmed by the one who loves the people. What is clear also is that what is loving the people is some human being. In order to accommodate this subject I have put down the subject noun phrase of S_1 with $\overline{[+ \text{ pers}]} / \overline{[+ \text{ pro}]}$ feature $\overline{+o}$ fill in this gap. The question for which a satisfactory answer is not immediately forthcoming is by what rule is this subject NP deleted as S_1 becomes nominalized? We cannot invoke Equi-NP deletion because its structural description will not have been met, that is, NP_3 is not identical with NP_1 . If this approach is maintained NP_3 will have to be deleted in some ad hoc fashion and this obviously is unsatisfactory. Faced with this and other related problems which we saw above it is difficult to see how a transformational approach to derived nominals can be usefully adopted.

In this study the lexicalist approach will be adopted for derived nominals and the transformationalist approach for infinitival nominals. A derived nominal like ungwarú (see (10g)) would include the following among its feature specifications in the lexicon:

(32) $\langle \bar{n}gwara, +N, +CL14, +u \text{ -----} \rangle$

The word ngwara will then be spelt out phonologically as ungwarú in this case. What (32) means is that the whole thing within the square brackets is a nominal because of the presence in the feature specification of the element $\langle \bar{+}N \rangle$. This nominal will have a noun affix of class 14 and ^{the} final vowel /a/ of ngwara will be replaced by the vowel /u/. Of course the feature specifications in (32) will have to include also the meaning of ngwara. Since derived nominals are not going to play a significant role in the rest of this study their discussion will not be pursued any further. Our concern will be with infinitival nominals and the other constructions in which complementizers are found.

4.0 COMPLEMENTIZERS AND THE UNDERLYING STRUCTURE

4.1 The Transformational Hypothesis

In my discussion so far I have assumed that complementizers are introduced transformationally into embedded complement sentences.¹ Following Bresnan I shall refer to this approach as the transformationalist hypothesis.² For the present I would like to discuss the extent to which this assumption can be validated.

It has already been noted that, although there are no identity constraints on the NP in the complement clauses, there are nevertheless restrictions that are imposed on the nature of a complement clause by the verb of the higher sentence. For instance, in (1) below the complement sentence is declarative but in (2) the complement sentence is a question.

(1) Ruzvidzo áidá kubá mángo.

(Ruzvidzo wanted to steal some mangoes.)

(2) Sara' ábvunza kana Suzi' ákauya.

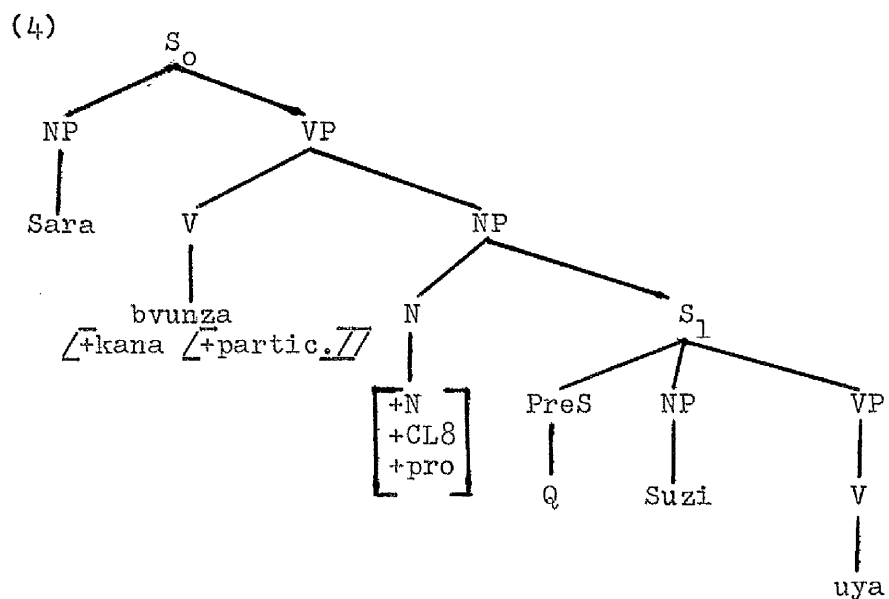
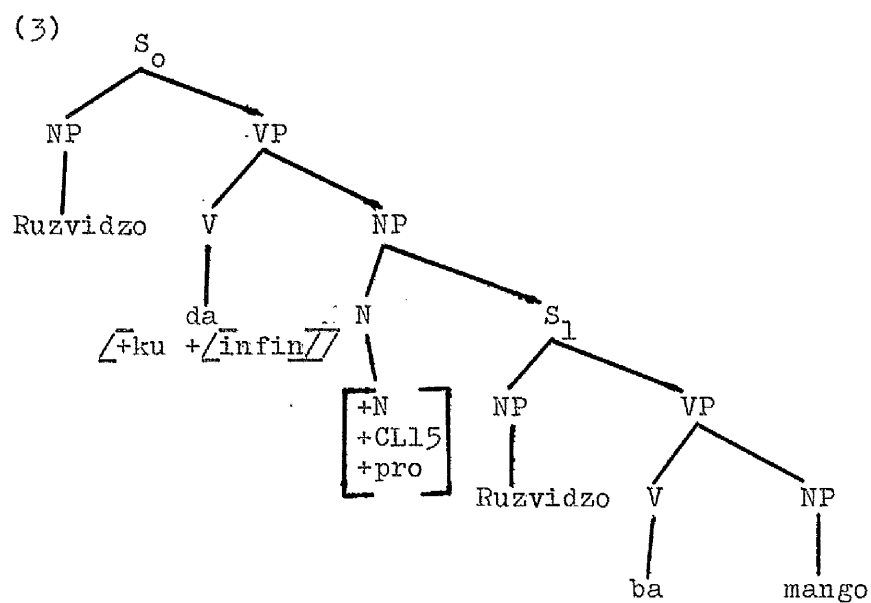
(Sara asked whether Suzi had come.)

This is illustrated by the tree diagrams in (3) and (4) which represent roughly the structures which underlie (1) and (2) respectively.

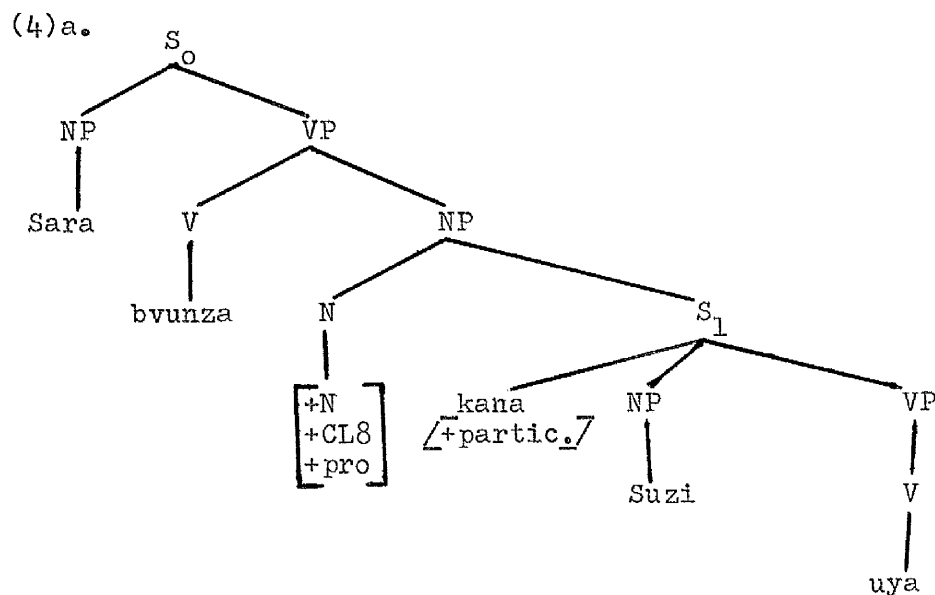
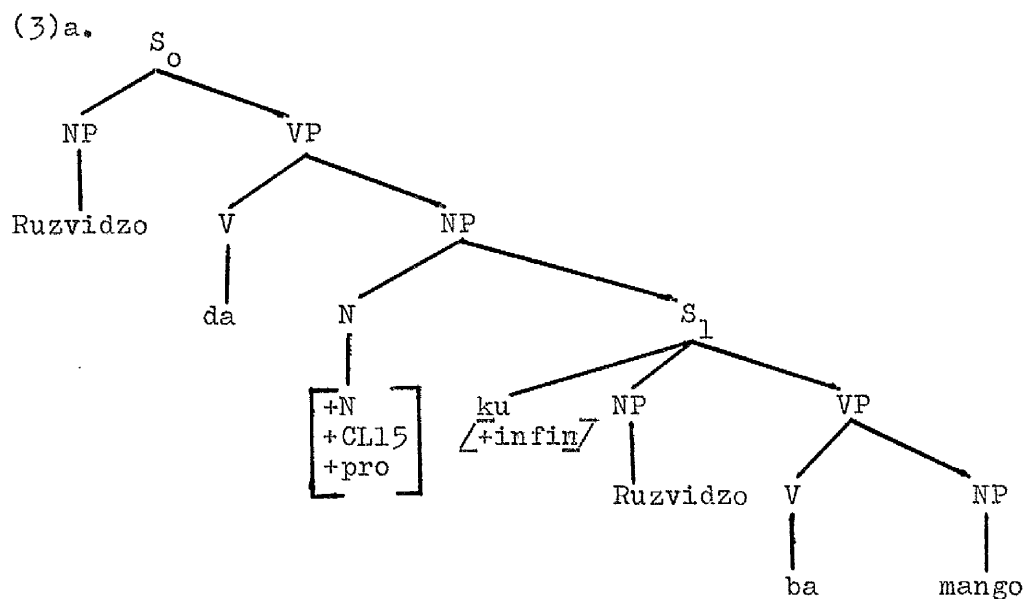
The complementizer which is introduced into the embedded sentence in (3) is ku [$\bar{+}$ infinitive], but in (4) it is kana [$\bar{+}$ participial]. (The list of complementizers in Shona is given in 2.10.)

1. For grammatical analyses which take this view see G.Lakoff (1966)^{8a}; Peter S.Rosenbaum (1967); J.R.Ross (1967); R.Lakoff (1968).

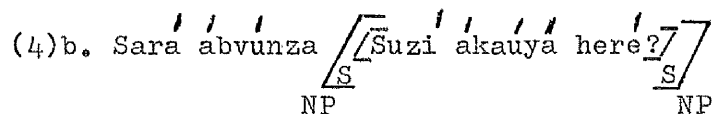
2. Joan W.Bresnan in "On Complementizers: Toward a Syntactic Theory of Complement Types" in Foundations of Language, 6 (1970), p.297 - 321.



Tree diagrams (3a) and (4a) show ku $\left[\begin{smallmatrix} + \\ \text{infinitive} \end{smallmatrix} \right]$ and kana $\left[\begin{smallmatrix} + \\ \text{partic.} \end{smallmatrix} \right]$ inserted into (3) and (4) respectively.



Note that when an embedded question is introduced by kana [+participial] the question formative does not appear in an overt form as is further illustrated by (4b) and (4c) below.



(Sara asked, did Suzi come?)

c. Sara 'abvunza kana Suzi 'akauya.

(Sara asked whether Suzi came.)

Here^a in (4b) is a question formative which does not appear in (4c).

The insertion of ku $\left[\begin{smallmatrix} + \\ - \end{smallmatrix} \right]$ infinitive $\left[\begin{smallmatrix} + \\ - \end{smallmatrix} \right]$ and kana $\left[\begin{smallmatrix} + \\ - \end{smallmatrix} \right]$ participial $\left[\begin{smallmatrix} + \\ - \end{smallmatrix} \right]$ into (3a) and (4a) respectively is governed by the verbs in the containing sentences, namely, -da and -bvunza. If ku $\left[\begin{smallmatrix} + \\ - \end{smallmatrix} \right]$ infinitive $\left[\begin{smallmatrix} + \\ - \end{smallmatrix} \right]$ is inserted into the embedded sentence in (4), and kana $\left[\begin{smallmatrix} + \\ - \end{smallmatrix} \right]$ participial $\left[\begin{smallmatrix} + \\ - \end{smallmatrix} \right]$ into the embedded sentence in (3), the result are the ungrammatical sentences in (5) and (6) respectively. The complementizer formatives are underlined in these examples.

(5) *Sara' ábvunza Suzi' kuúya'.

(6) *Ruzvidzo áida' kana áiba' mángo.

The point is that the verb -da may not be followed by a complement clause which is introduced by kana $\left[\begin{smallmatrix} + \\ - \end{smallmatrix} \right]$ participial $\left[\begin{smallmatrix} + \\ - \end{smallmatrix} \right]$. The same applies to the verb -bvunza; it cannot be followed by a complement clause which is introduced by ku $\left[\begin{smallmatrix} + \\ - \end{smallmatrix} \right]$ infinitive $\left[\begin{smallmatrix} + \\ - \end{smallmatrix} \right]$. Therefore it seems quite clear that the verb in the higher sentence is the one which determines which complementizer is to be inserted into an embedded sentence.

It is observed that ku and kana which are present in the sentences in (1) and (2) respectively are not present in the deep structures of these sentences as represented by the trees in (3) and (4). The fact is, according to this approach, complementizers are regarded as mere markers of subordination which are introduced into embedded sentences indicating that these embedded sentences were generated by the operation of the phrase structure rule:

NP \longrightarrow N(S).

Furthermore, given "meaning preservation" of transformational rules, this hypothesis claims that complementizers are devoid of semantic content per se. They are not generated in deep structure, but are rather introduced transformationally.

Some of these complementizers are grammatical in some sentences but not in others. Which complementizer is found in any given embedded

sentence is governed by the verb in the higher sentence. It seems to be the case also that most verbs can occur with only one complementizer. Some however are capable of occurring with more than one though not in one and the same complement clause, for complementizers are mutually exclusive. The following are examples of verbs which may occur with more than one complementizer:

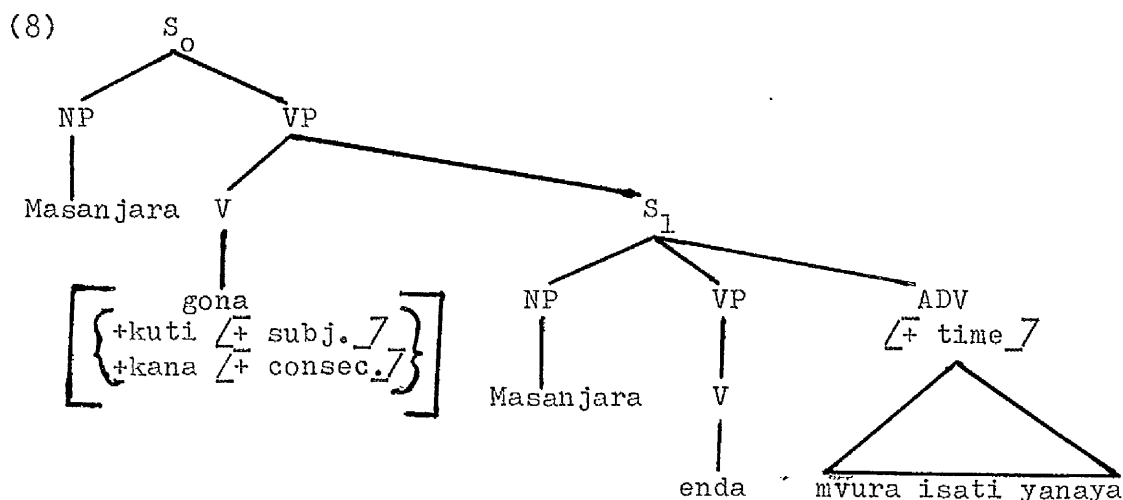
(7)a. Masanjara ágóna kuti áendé mvúra ísati' yánayá.

(Masanjara - did well - that - he go - rain - it not having - it rained = Masanjara did well to go before it rained.)

b. Masanjara ágóna akaenda mvúra ísati' yánayá.

(Masanjara did well to go before it rained.)

In (7a) the verb -gona is accompanied by the complement clause kuti áendé which is introduced by kuti [$\bar{+}$ subjunctive $\bar{/}$]. But in (7b) the same verb -gona is followed by the complement clause akaenda which is introduced by kana [$\bar{+}$ consecutive $\bar{/}$]. These two sentences have the same deep structure and the same semantic interpretation. (Note that kana is then obligatorily deleted in this sentence (see 2.8)) The verb -gona in this case is subcategorized as occurring in the environment [$\bar{+}$ ____ S $\bar{/}$]. This S is not dominated by NP, but directly by VP. When the verb -gona is subcategorized in this way, then either kuti [$\bar{+}$ subjunctive $\bar{/}$] or kana [$\bar{+}$ consecutive $\bar{/}$] must be selected and inserted into the complement clause. The deep structure of the sentences in (7) is provided in (8) below.



Here are further examples of pairs of sentences in which the individual sentences in each pair have different complementizers but sharing the same meaning. The complement sentences are underlined and the complementizers are enclosed in square brackets after each sentence.

(9)a. Ngátitangei' tádyá ndókuzoenda kubhóra. [kana + participial]

b. Ngátitangei' kudya ndókuzoenda kubhóra. [ku + infinitive]

(Let us have our meal first and then go to watch soccer afterwards.)

(10)a. Dambudzo ásara akasvika iwe' waenda. [kana + consecutive]

b. Dambudzo ásara osvika iwe' waenda. [kana + participial]

(Dambudzo - remained - she arrive - you - having gone =
Dambudzo arrived after you had gone.)

(11)a. Nezáuro vákarárá vachitamba ngóma. [kana + participial]

(yesterday - they slept - they dancing - a drum =
They spent last night dancing to the tune of a drum.)

b. Nezáuro vákarárótamba ngóma.³ [ku + infinitive]

(yesterday - they slept - dance - a drum =
They slept last night dancing to the tune of a drum.)

(12)a. Sekai naJeni' vanogara vachitukana. [kana + participial]

(Sekai - and Jeni - stay always - they scolding each other =
Sekai and Jeni are always scolding each other.)

b. Sekai naJeni' vanogarotukana. [ku + infinitive]

(Sekai - and Jeni - stay always - scold each other =
Sekai and Jeni are always scolding each other.)

It is not uncommon to find a verb which takes any two or more complementizers usually with some difference in semantic interpretation.

3. The forms -tamba in (11b) and -tukana in (12b) are contracted infinitives which are discussed in 6.2.1.2.

In such instances it seems to be the case that the deep structure in which that verb occurs with one complementizer will be different from that of the same verb with another complementizer. As an illustration consider the following pair of sentences.

(13)a. Piri' agóna kuvhura gónhi.

(Piri managed to open the door.)

b. Piri' agóna akavhura gónhi.

(Piri - did well - she opened - the door =

Piri did well by opening the door.)

The complement clause in (13a) is introduced by ku [+infinitive] while that of (13b) is introduced by kana [+consecutive]. The meaning of the verb -gona is different in these two sentences. In (13a) it means "manage, succeed", whereas in (13b) it means something like "be wise, clever, do well". According to this approach the difference between these two sentences is attributed, not to the different complementizers, but rather to the different semantic readings of the verb -gona. That there are two distinct verbs which happen to have the same phonological form -gona is further confirmed by the parallel differences of meaning with the following sentences some of which do not contain complementizers.

(14)a. Tsitsi' agóna sámu.

(Tsitsi got the sums right.)

b. Tsitsi' agóna akavhura gónhi.

(Tsitsi did well by opening the door.)

(15) Tsitsi' agóna akagona sámu.

(Tsitsi did well by getting the sums right.)

With the meaning which it has in (14a) -gona can occur with or without a complement clause, whereas -gona in (14b) must always occur with a complement clause. In (15) the first -gona is the same as the one in (14b), while the second -gona is the same as the one in (14a). So they are definitely two different verbs which happen to share the same form.

One interesting observation is that verbs of "counselling" and of "asking" like: -údzá (tell), -kumbírá (ask), -komérá (instruct forcefully), -raira (give advice, counsel), -temá (decide, decree), cannot normally have the subject noun phrases of the higher sentence and the lower sentence identical. The sentences in (16) are grammatical but not those in (17).

(16)a. Taka' akakumbírá Deni kúti ábvé mumbá ímomo.

(Taka asked Deni to move out of that house.)

b. Taka' akamukumbírá kúti ábvé mumbá ímomo.

(Taka asked him to move out of that house.)

(17)a. *Taka' akakumbírá Taka kúti ábvé mumbá ímomo.⁴

(*Taka asked Taka to move out of that house.)

b. *Taka' akazvikumbírá kúti ábvé mumbá ímomo.

(*Taka asked himself to move out of that house.)

But verbs which refer to mental state and also those which relate to speaking can have the subject noun phrases of the higher sentences and lower sentences identical. These are verbs like: -ti (say), -funga (think), -rangarira (remember, ponder, meditate), -yeuka (remember), -fungidzira (suspect, expect), -karira (expect, think), -óná (see, realize). In the deep structure of the following sentences the subject noun phrases of the complement sentences are identical with those of the respective higher sentences. In the superficial structure however the subject noun phrase of the complement sentence does not appear because it is deleted obligatorily by the ^Equi-NP rule.

(18) Mwana' afunga kuenda Joni'.

(The young man has thought of going to Johannesburg.)

(19) Vasekuru vakatí vanouya mangwana.

(Grandfather said that he would come on the following day.)

4. This sentence would be grammatical if the second Taka did not refer to the first Taka.

Therefore it would appear that there are restrictions that are found between the subject noun phrases of higher and lower sentences with some classes of verbs.

Consider further the strings which are underlined in the following pair of sentences.

(20)a. Nhámó paápúnzíká, kuti ásimúke zvárámba.

(Nhamo - when he fell - that - he stand up - it refused =

After Nhamo had fallen down he failed to get up on his feet.)

b. Nhámó paápúnzíká, arámba kuti ásimúke.

(Nhamo - when he fell - he refused - that - he get up =

When Nhamo fell down he refused to get up on his feet.)

In both these sentences the verb in the higher sentence is -ramba and the complement clause is kuti ásimúke. But note that whereas in (20a) this complement clause is in a subject position, in (20b) it is in a direct object position. Besides, the meaning of the verb -ramba is different in the two sentences. In (20a) it means "fail, be unable" but in (20b) it means "refuse, be unwilling". It may also be observed that the complement clause in both cases is introduced by the same complementizer, namely, kuti [$\bar{+}$ subjunctive $\bar{/}$]. What is striking here is that -ramba is intransitive in (20a) but transitive in (20b). When it is intransitive the subject noun phrase must be abstract in the sense that it must be expanded as: N(S), at some stage. But when it is transitive its direct object may or may not be an abstract noun phrase.

These observations suggest that the sentences in (13), and also those in (20), differ from each other in their deep structure. The verb -gona in (13a) and -gona in (13b) differ from each other in both their meaning and their rule feature specification,⁵ e.g. they have

5. For a discussion on rule features see G. Lakoff in Irregularity In Syntax, (1970).

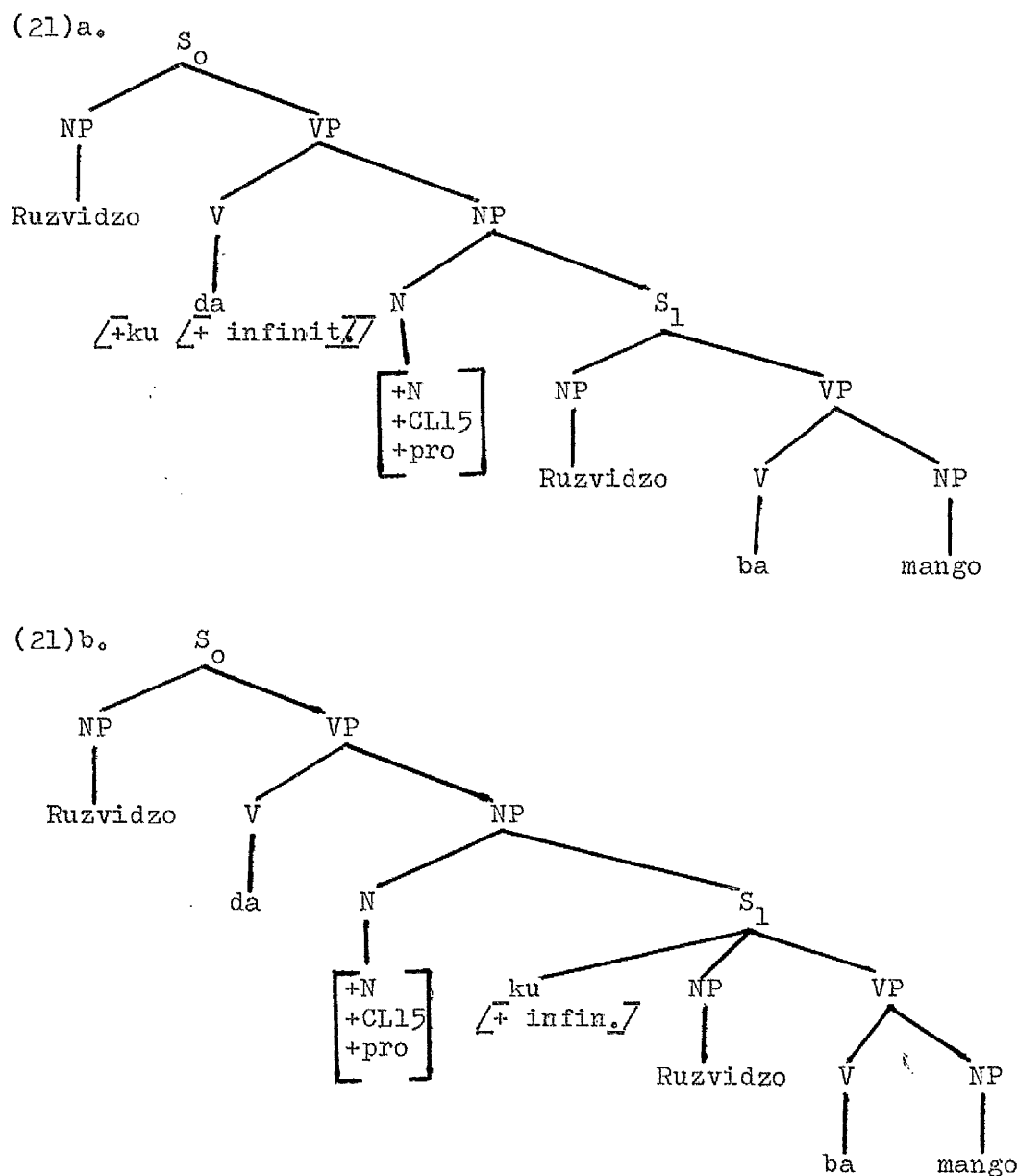
different complementizers. In the case of (20) the two verbs with the same phonological form -ramba differ in their meaning as well as in their selectional restrictions. Nonetheless their rule feature specification with respect to complementizers is the same as was pointed out above.

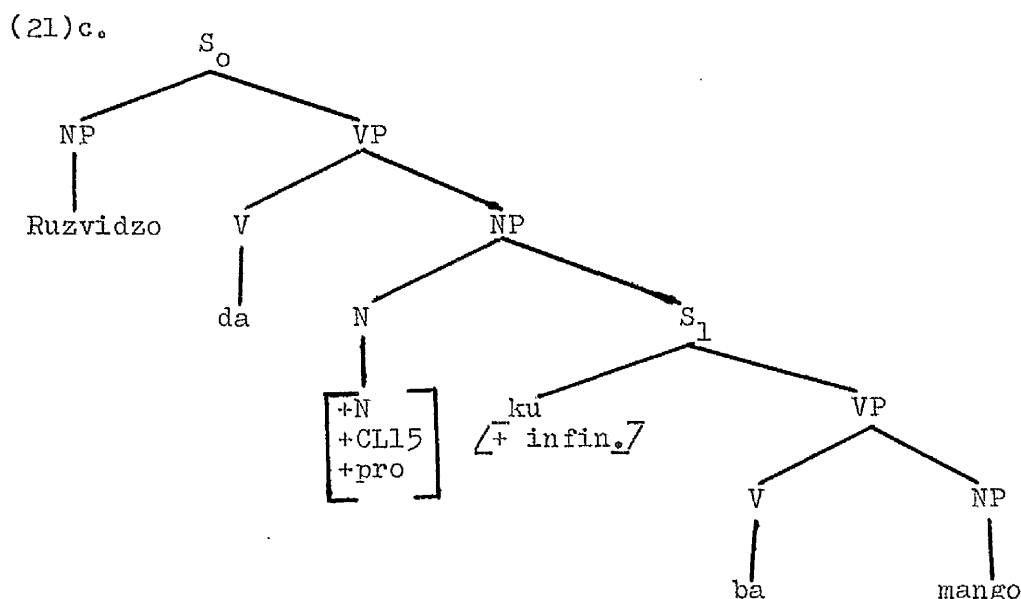
Since, according to this approach, complementizers are introduced into embedded sentences by the operation of transformational rules, the verbs which are subcategorized as having sentential complements will be entered in the lexicon together with the complementizers which they permit to be inserted into their complement clauses. The complementizers will form part of the rule feature specification of these verbs, a rule feature specification being considered as an instruction indicating which rule or rules apply to the structure in question. This rule specification will form part of the complex symbol of the verb of the containing sentence. These rule features indicate which rule relating to complementizers may be inserted into a complement clause. The complement clause may either be under the direct domination of VP or NP, and in the case of the latter the complement clause may be in either the subject or the object position in relation to the verb in the containing sentence. After a complementizer has been inserted into an embedded sentence the structure which results is still not the final form of that sentence which is under consideration. More often than not, other transformational rules, some of which are obligatory and others optional, must be applied to these complement-containing sentences before the surface structure is reached.

To illustrate further the concept of rule feature in respect of sentential complementation in Shona let us look at the sentences in (1) and (2) more closely. The complementizers which we have seen in this regard are: ku [+ infinitive] and kana [+ participial]. In that case the verbs -da and -bvunza would be marked in the lexicon (either directly or by a redundancy rule) as respectively +ku [+ infinitive],

$-\bar{k}u$ $\bar{+}$ infinitive $\bar{+}$ and $-\bar{k}ana$ $\bar{+}$ participial $\bar{+}$, $+\bar{k}ana$ $\bar{+}$ partic. $\bar{+}$.

Since complementizer insertion is sensitive to the rule feature of the verb in the higher sentence, its operation is peculiar in that a complementizer cannot be inserted into a clause S_i during the transformational cycle on that S_i . A complementizer can only be inserted into this S_i during the cycle on the higher sentence S_h which dominates S_i . The tree diagrams in (21) below show how (1) is derived following this transformational hypothesis. Diagram (21a) is the same as the one in (3) which is reproduced here for convenience.





It is observed that on the first cycle in (21a) no transformations apply in this case.⁶ On the second cycle, that is S_0 , ku /+ infinitive/ insertion applies because the verb -da is marked for it. This is illustrated in (21b). In (21c) the subject-NP of S_1 has been deleted under identity with the subject-NP of S_0 .

If we had a sentence like the one in (22) its derivational history would be as shown in (23).

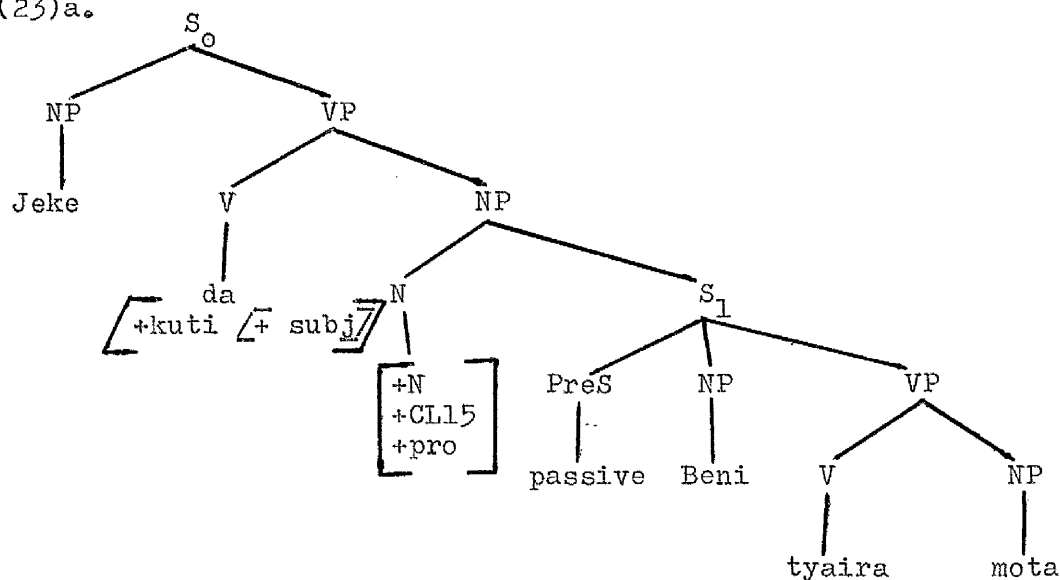
(22) Jeke áida kúti móta ítyáírwe naBéni.

(Jack wanted the car to be driven by Ben.)

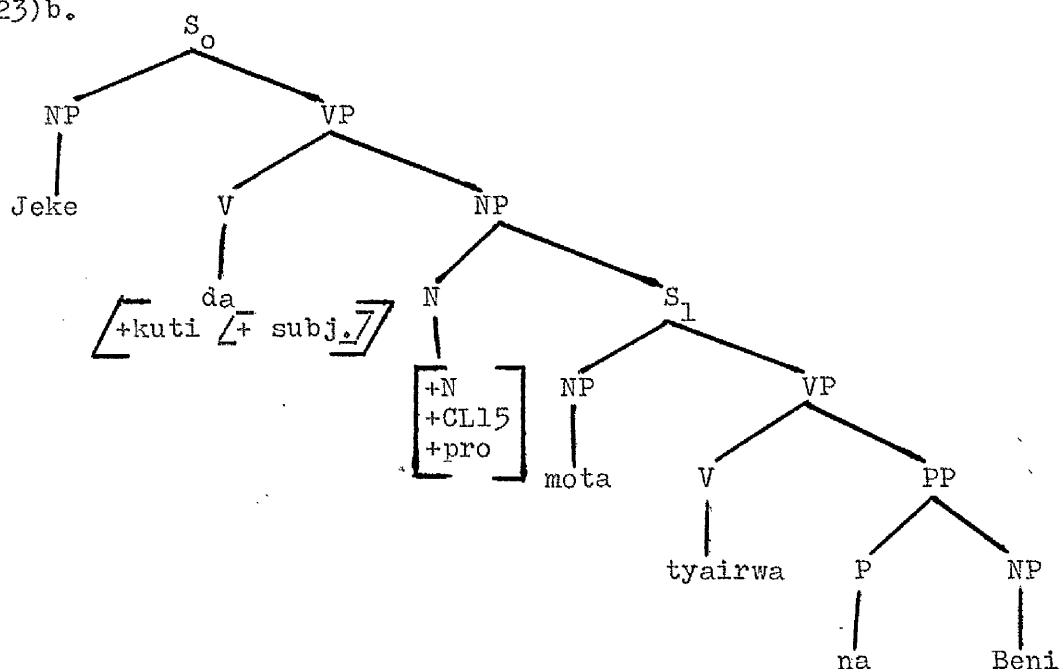
Because there is a passive marker in S_1 in (23a) the passive transformation is applied on S_1 . The configuration which results is (23b). This can be done because the passive transformational rule is not sensitive to the verb in the higher S for its application. After this application

6. For a discussion on the concept of transformational cycle refer to N.Chomsky in Aspects of the Theory of Syntax (1965); also J.T.Grinder and S.H.Elgin in Guide to Transformational Grammar (1973); J.P.Kimball on "Cyclic and Linear Grammars", and John Grinder on "On the Cycle in Syntax" both in Syntax and Semantics, (1972), J.P.Kimball (editor).

(23)a.

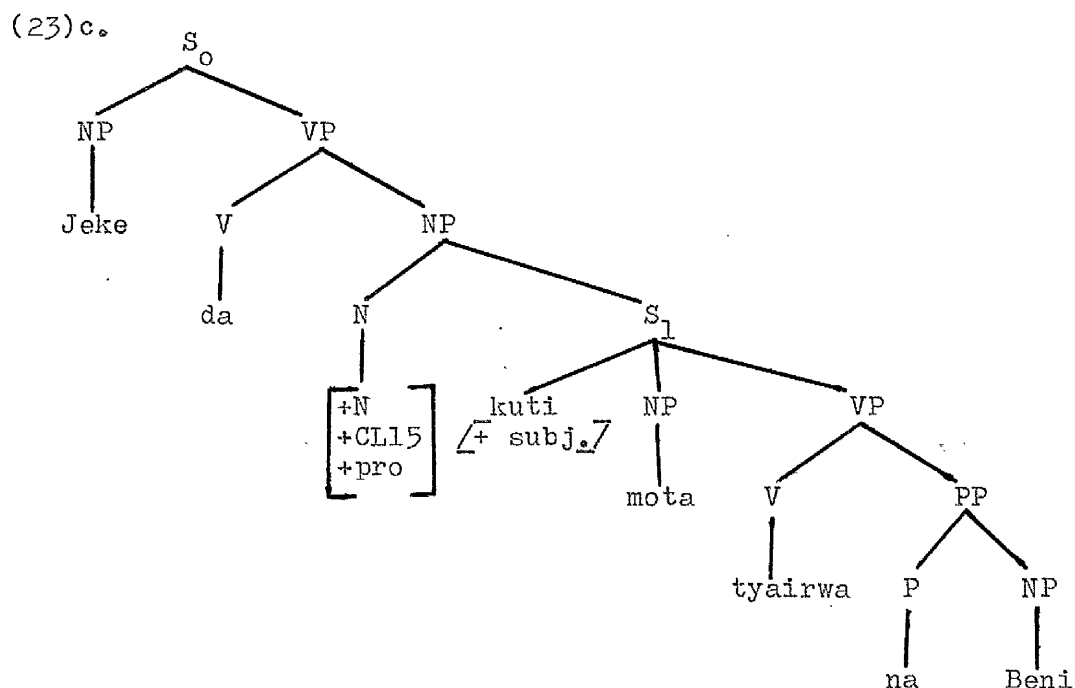


(23)b.



of the passive rule we cannot tell what rule to apply next on S_1 . Since S_1 is an embedded sentence, we look up to the verb in the higher S to see what rule feature(s) it has. In the case at hand our attention centres on the verb *da*. Since it is marked for *kuti* $[-subj]$ the next step is to insert *kuti* $[-subjunctive]$ into S_1 as in (23c). After applying later rules we finally come up with sentence (22).

In both (21) and (23) the crucial point is that no complementizer insertion rule could apply on the first cycle, S_1 , because the



transformation would not 'know' which complementizer(s) is permitted by the verb -da until the next higher S (i.e. S_0) is cycled. In other words, as Bresnan says⁷, the structural description of any complementizer insertion transformation cannot be limited to a complement clause, but must include the verb which that clause complements. This transformational hypothesis has the advantage that it ensures that non-embedded sentences can never appear with complementizers, e.g.

(24) *Kuti móta ityáirwe naBéni.

(*That the car be driven by Ben.)

4.2 Inadequacies of the Transformational Hypothesis

While it is true that the transformational hypothesis guarantees that no non-embedded sentences will ever appear with complementizers, it nevertheless undermines an otherwise well-motivated universal which was put forward by Chomsky, namely, that while transformations may re-

7. op. cit. p.299

move material from embedded sentences, no morphological material can be introduced into a structure which is dominated by S once the cycle of transformational rules has already completed its application to this structure.⁸ For instance, as we saw in (21a) and (23b) complementizer insertion could not apply when S_1 was cycled because at that stage it would not be known which complementizer was the appropriate one to be inserted. Complementizers were inserted only in the next higher cycle, namely, S_0 in both cases. Complementizer insertion usually introduces new morphological material into the S to which it applies as was seen in the examples cited above.

One claim made by the transformational hypothesis is that complementizers are semantically empty. While this may appear to be true with respect to the pairs of sentences in (7) - (12), it is certainly not true of the pair of sentences in (25).

(25)a. Midzi ákanyára kúti ákátaúra nhemá pádare.

(Midzi - was ashamed - that - he told - lies - at court =

Midzi was ashamed of himself because he lied at the court.)

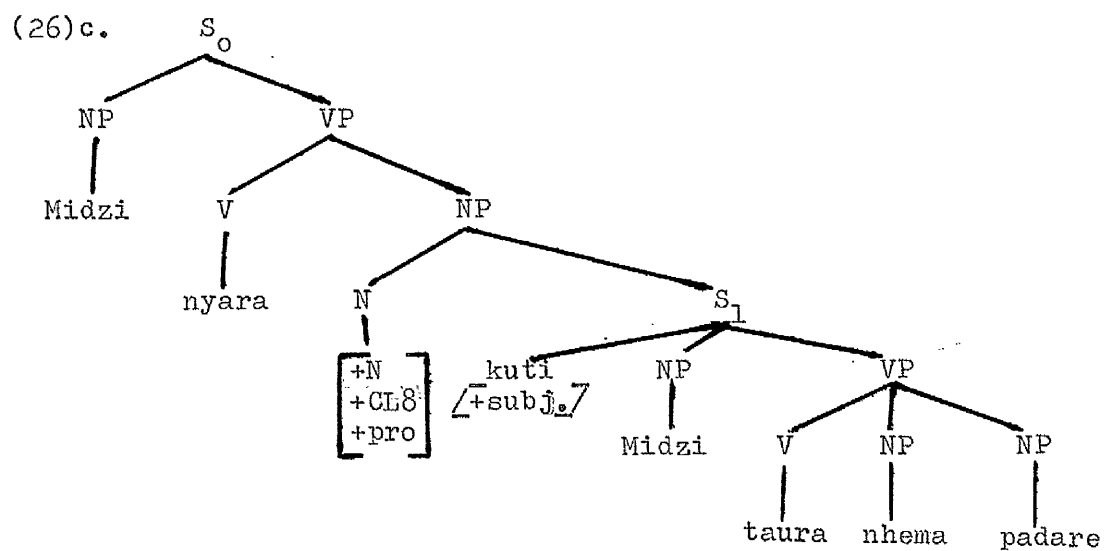
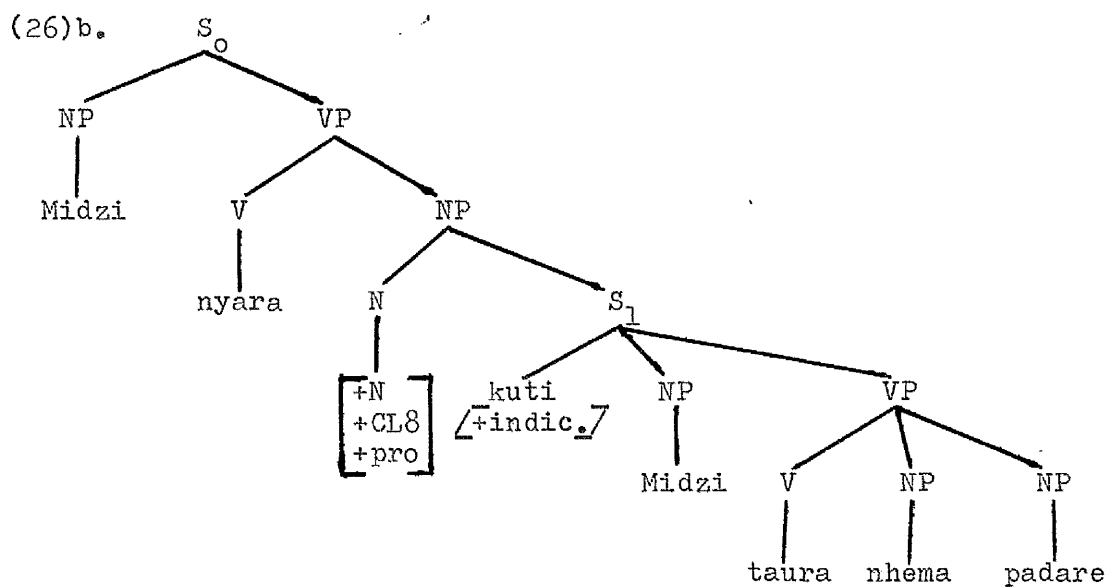
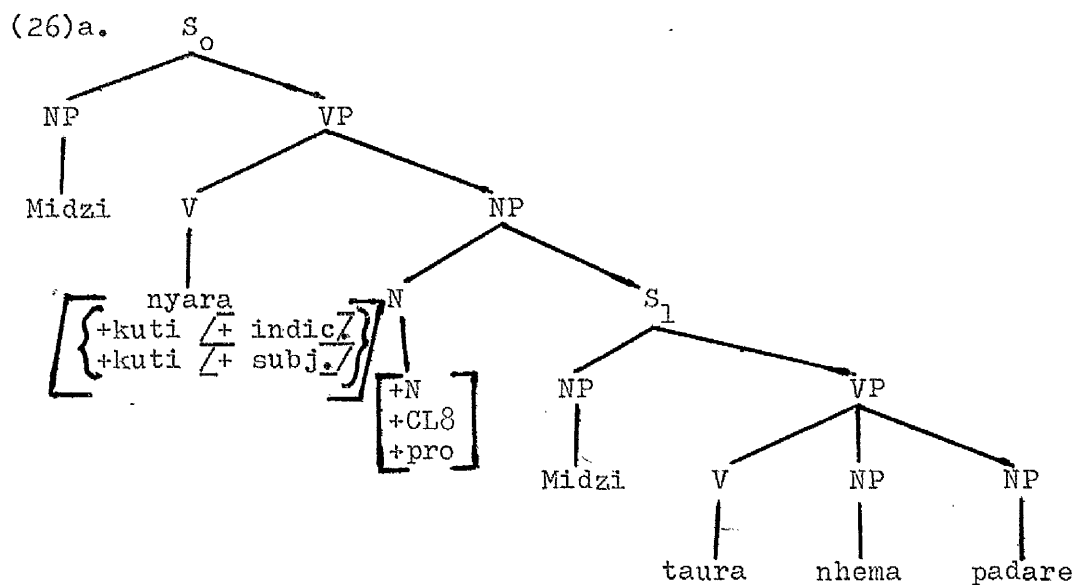
b. Midzi ákanyára kúti átaúre nhemá pádare.

(Midzi - was ashamed - that - he tell - lies - at court =

Midzi was too ashamed to tell lies at the court.)

These two sentences in (25) are different in meaning although they would derive from the same underlying structure according to the transformational hypothesis. Their underlying structure is provided in (26a) below. Sentence (25a) is derived by selecting and inserting kuti $\left[\begin{smallmatrix} + \\ \text{indicative} \end{smallmatrix} \right]$, and sentence (25b) by inserting kuti $\left[\begin{smallmatrix} + \\ \text{subjunctive} \end{smallmatrix} \right]$, into S_1 . This yields the derived underlying structures in (26b) and (26c) respectively. It is entailed in (25a) that Midzi actually told lies before the court,

8. op. cit. p.146



while in (25b) he definitely refrained from telling lies before the court. It seems evident then that the difference in meaning between these two sentences is attributed to the different complementizers. These sentences differ only in the complementizers inserted into their complement clauses. Further examples of pairs of sentences which differ in meaning by virtue of the complementizers inserted into their embedded sentences are given below.

- (27)a.i. Ndinotya' kúti nyaya' iyi inobúda' páchena ndísati' ndáwana' mari' yokuripisa.

(I fear that this affair will come into the open before I have the money with which to pay the fine.)

- ii. Ndinotya' kúti nyaya' iyi íbúde' páchena ndísati' ndáwana' mari' yokuripisa.

(I am frightened in case this affair comes into the open before I have the money with which to pay the fine.)

- b.i. Makanganwa kuti tsamba dzaénda mangwanani'.

(You have forgotten that the letters were taken in the morning.)

- ii. Makanganwa kuti tsamba dziéndé mangwanani'.

(You forgot to post the letters in the morning.)

- c.i. Tiri' kumufungira kuti anouya mangwana.

(We are expecting him to come tomorrow.)

- ii. Tiri' kumufungira kuti áúyé mangwana.

(We are thinking of bringing him tomorrow.)

- d.i. Tendai anosema kúti vana' vanodyira' pané nhunzi.

(Tendai is disgusted by the fact that the children have their meal at a place where there are flies.)

- ii. Tendai anosema kúti vana' vadyire' pané nhunzi.

(Tendai is disgusted that the children should have their meal at a place where there are flies.)

- e.i. Mashiri áno'shora kuti Gárwe ákatizá achisiyá vaná váké.
(Mashiri condemns the fact that Garwe ran away leaving his children behind.)
- ii. Mashiri áno'shora Gárwe kuti átizé achisiyá vaná váké.
(Mashiri condemns the idea that Garwe should run away leaving his children behind.)
- f.i. Kuti Sani'ánoúyá mangwána zvinondifádza.
(That Sani is coming tomorrow pleases me.)
- ii. Kuti Sani'áuyé mangwána zvinondifádza.
(For Sani to come tomorrow would please me.)

It was mentioned above that complementizers could be regarded as constituting part of the rule features on verbs. But this line of approach poses a problem in the case of some verbs. To this end consider the following data. Notice that in (28a) the complementizer in the complement clause following the verb -kónzera is kuti [+subjunctive].

- (28)a.i. Kuti murúmé némukádzi vagaré vachirwá zvinokónzera kúti varámbáne.
(For a man and his wife to be always fighting will cause them to divorce each other.)
- ii. Kana murúmé némukádzi vakagara vachirwá zvinokónzera kúti varámbáne.
(If a man and his wife are always fighting it will cause them to divorce each other.)
- iii. Murúmé némukádzi kugara vachirwá zvinokónzera kúti varámbáne.
(For a man and his wife to be always fighting will cause them to divorce each other.)
- iv. *Kuti murúmé némukádzi vagára vachirwá zvinokónzera kúti varámbáne.
(*That a man and his wife are always fighting will

cause them to divorce each other.)

- v. Kana murúmé némukádzi' vágara' vachírwa' zvinokónzera' kúti
varambana.

(If a man and his wife are always fighting it will
cause them to divorce each other.)

The following sentences are the same as those in (28a) above save that
the object complement clause of the verb -kónzera' is introduced by kuti
[+ indicative] in place of kuti [+ subjunctive].

- (28)b.i. *Kuti murúmé némukádzi' vágara' vachírwa' zvinokónzera' kúti
varambana.
- ii. *Kana murúmé némukádzi' vakagara vachírwa' zvinokónzera'
kúti varambana.
- iii. *Murúmé némukádzi' kugara vachírwa' zvinokónzera' kúti
varambana.
- iv. *Kuti murúmé némukádzi' vágara vachírwa' zvinokónzera'
kúti varambana.
- v. *Kana murúmé némukádzi' vágara' vachírwa' zvinokónzera'
kúti varambana.

As above, the following sentences are the same as those in (28a) except
that the object complement clause of the verb -kónzera' is introduced by
kana [+ consecutive] in place of kuti [+ subjunctive].

- (28)c.i. *Kuti murúmé némukádzi' vágara' vachírwa' zvinokónzera' kana
vakarambana.
- ii. *Kana murúmé némukádzi' vakagara vachírwa' zvinokónzera'
kana vakarambana.
- iii. *Murúmé némukádzi' kugara vachírwa' zvinokónzera' kana
vakarambana.
- iv. *Kuti murúmé némukádzi' vágara vachírwa' zvinokónzera' kana
vakarambana.
- v. *Kana murúmé némukádzi' vágara' vachírwa' zvinokónzera' kana
vakarambana.

In the following sentences the object complement clause of -kónzera' has ku [+ infinitive] in place of kuti [+ subjunctive].

(28)d.i. Kuti murúme' némukádzi' vágare' vachirwa' zvinokónzera'
kúrambana.

(For a man and his wife to be always fighting will cause
their marriage to break down.)

ii. Kana murúme' némukádzi' vakagara vachirwa' zvinokónzera'
kúrambana.

(If a man and his wife are always fighting it will cause
their marriage to break down.)

iii. Murúme' némukádzi' kugara vachirwa' zvinokónzera' kúrambana.

(same meaning as in (i) above)

iv. *Kuti murúme' némukádzi' vágara vachirwa' zvinokónzera'
kúrambana.

v. Kana murúme' némukádzi' vágara vachirwa' zvinokónzera'
kúrambana.

(same meaning as in (ii) above)

The sentences which follow differ from those in (28a) in only one respect, namely, kana [+ participial] replaces kuti [+ subjunctive] in the object complement clause of the verb -kónzera'.

(28)e.i. *Kuti murúme' némukádzi' vágare' vachirwa' zvinokónzera' kana
várambana.

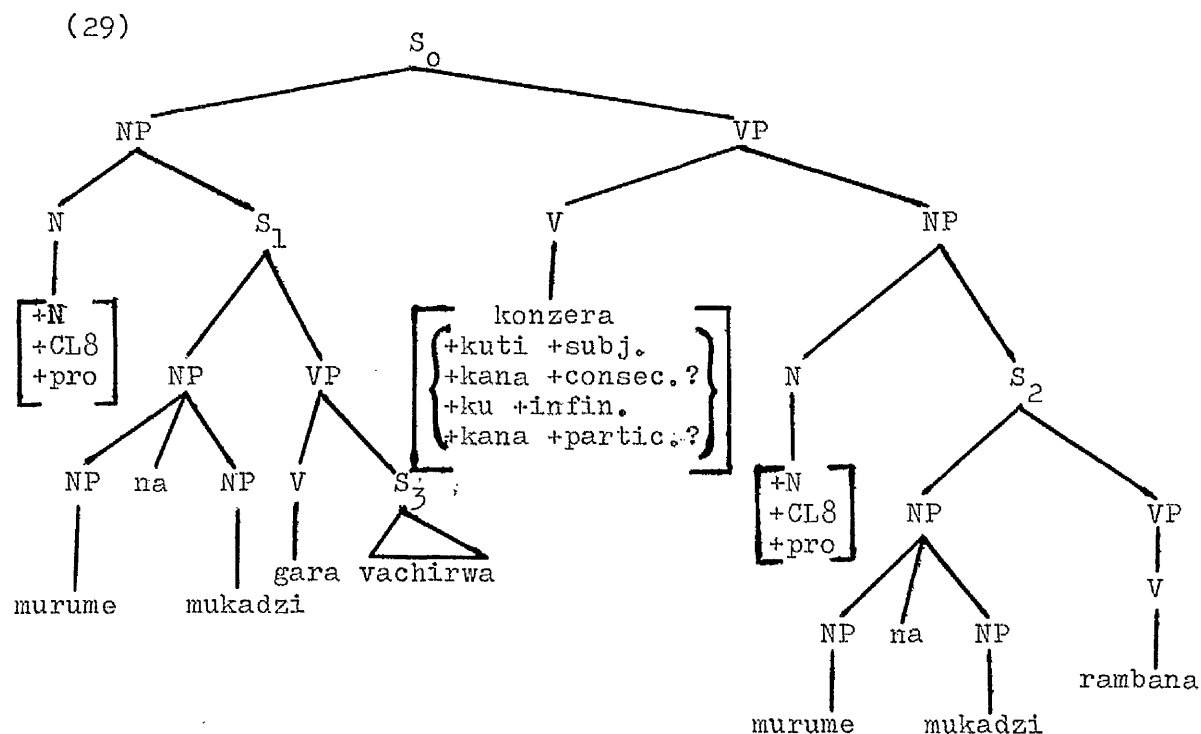
ii. *Kana murúme' némukádzi' vakagara vachirwa' zvinokónzera'
kana várambana.

iii. *Murúme' némukádzi' kugara vachirwa' zvinokónzera' kana
várambana.

iv. *Kuti murúme' némukádzi' vágara vachirwa' zvinokónzera' kana
várambana.

v. *Kana murúme' némukádzi' vágara vachirwa' zvinokónzera' kana
várambana.

The rough underlying structure of the sentences in (28) is something like (29) below.



Now let us see how, for instance, (28a.i) is derived. No transformational rules apply when S_1 (or S_2) is cycled because at that stage it is not known which complementizer is to be inserted into it. In the second cycle, that is S_0 , kuti [$\bar{+}$ subjunctive] is inserted into S_1 , and also into S_2 . After this complementizer insertion and applying the other rules, the details of which do not concern us here, we eventually obtain sentence (28a.i). Now in order to derive the sentences in (28a.ii, iii, v) kana [$\bar{+}$ consecutive], ku [$\bar{+}$ infinitive], and kana [$\bar{+}$ participial] respectively are inserted into S_1 , but not into S_2 which continues to have kuti [$\bar{+}$ subjunctive] inserted into it.

As it has already been mentioned above the sets of sentences in (28b), (28c), (28d) and (28e) are the same as the set of sentences in (28a) except that kuti [$\bar{+}$ indicative], kana [$\bar{+}$ consecutive], ku [$\bar{+}$ infinitive] and kana [$\bar{+}$ participial] respectively have been inserted in place of kuti [$\bar{+}$ subjunctive] into S_2 . The paradigms in (28) indicate (a) that

the verb -kónzera' may have in one and the same sentence both an abstract subject-NP and an abstract direct object-NP; (b) that the complement clause of the subject-NP of this verb may have inserted into it either ku $\overline{+}$ infinitive, or kana $\overline{+}$ participial, or kana $\overline{+}$ consecutive, or kuti $\overline{+}$ subjunctive; and (c) that the complement clause of the object-NP of this verb may have inserted into it either kuti $\overline{+}$ subjunctive or ku $\overline{+}$ infinitive only. These observations are borne out by (a) the ungrammaticality of all the sentences in (28b), (28c) and (28e) in which incorrect complementizers are inserted into S_2 ; and (b) the ungrammaticality of the (iv) sentences in all these five sets (i.e. 28a - e) because an incorrect complementizer is inserted into S_1 .

If it is insisted that complementizer insertion constitutes part of the rule feature specification of a verb, then it has to be reflected in the complex symbol of verbs like -kónzera' that while ku $\overline{+}$ infinitive or kuti $\overline{+}$ subjunctive may be inserted into a complement clause which is in the subject NP position, as well as into a complement clause in the object NP position, kana $\overline{+}$ participial and kana $\overline{+}$ consecutive may be inserted only into a complement clause which is in the subject NP position of such verbs. I do not know how such rule features could be formulated in any current model. It is for this reason that kana $\overline{+}$ consecutive and kana $\overline{+}$ participial in the tree diagram in (29) appear with question marks. These two can only be inserted into S_1 , while kuti $\overline{+}$ subjunctive and ku $\overline{+}$ infinitive can be inserted into both S_1 and S_2 .

We have a more or less similar situation in the sentences in (30). In (30a) the complement clause of the direct object of the verb -ratidza has kuti $\overline{+}$ indicative as complementizer.

(30)a.i. Kuti Deni' átakúre tsága iri zvinoratidza kuti ákásimba.

(For Deni to carry this bag shows that he is strong.)

ii. Kana Deni' akatakura tsága iri zvinoratidza kuti ákásimba.

(If Deni carries this bag it will show that he is strong.)

iii. Deni' kutakura tsága iri zvinoratidza kuti ákásimba.

(same meaning as in (i) above)

iv. Kuti Deni' átakura tsága iri zvinoratidza kuti ákásimba.

(That Deni carried this bag shows that he is strong.)

v. Kana Deni' átakura tsága iri zvinoratidza kuti ákásimba.

(If Deni carried this bag it shows that he is strong.)

In the following sentences the complement clause of the object of -ratidza have each kuti $\left[\begin{smallmatrix} - \\ + \end{smallmatrix} \right]$ subjunctive.

(30)b.i. *Kuti Deni' átakure tsága iri zvinoratidza kuti ásimbé.

ii. *Kana Deni' akatakura tsága iri zvinoratidza kuti ásimbé.

iii. *Deni' kutakura tsága iri zvinoratidza kuti ásimbé.

iv. *Kuti Deni' átakura tsága iri zvinoratidza kuti ásimbé.

v. *Kana Deni' átakura tsága iri zvinoratidza kuti ásimbé.

In the sentences which follow kana $\left[\begin{smallmatrix} - \\ + \end{smallmatrix} \right]$ consecutive is substituted for kuti $\left[\begin{smallmatrix} - \\ + \end{smallmatrix} \right]$ indicative in the complement clause of the object NP.

(30)c.i. *Kuti Deni' átakure tsága iri zvinoratidza kana akasimba.

ii. *Kana Deni' akatakura tsága iri zvinoratidza kana akasimba.

iii. *Deni' kutakura tsága iri zvinoratidza kana akasimba.

iv. *Kuti Deni' átakura tsága iri zvinoratidza kana akasimba.

v. *Kana Deni' átakura tsága iri zvinoratidza kana akasimba.

Ku $\left[\begin{smallmatrix} - \\ + \end{smallmatrix} \right]$ infinitive substitutes for kuti $\left[\begin{smallmatrix} - \\ + \end{smallmatrix} \right]$ indicative in the complement clause of the object NP in the following sentences.

(30)d.i. *Kuti Deni' átakure tsága iri zvinoratidza kusimba.

ii. *Kana Deni' akatakura tsága iri zvinoratidza kusimba.

iii. *Deni' kutakura tsága iri zvinoratidza kusimba.

iv. *Kuti Deni' átakura tsága iri zvinoratidza kusimba.

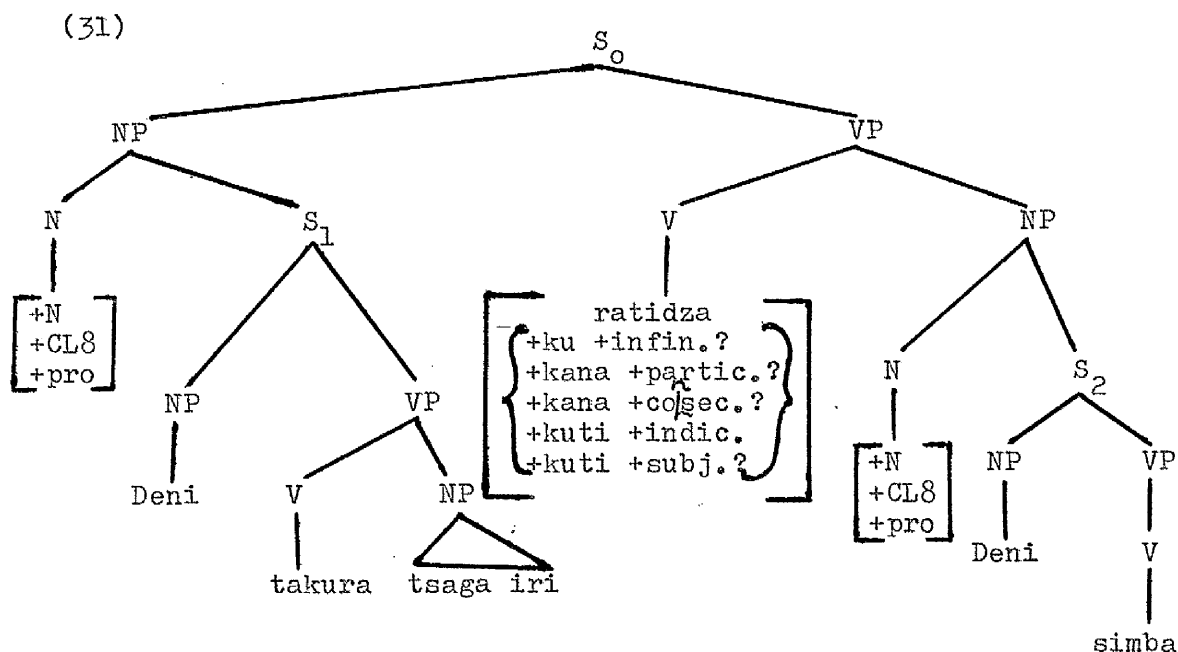
v. *Kana Deni' átakura tsága iri zvinoratidza kusimba.

In the following sentences kana $\left[\begin{smallmatrix} - \\ + \end{smallmatrix} \right]$ participial replaces kuti $\left[\begin{smallmatrix} - \\ + \end{smallmatrix} \right]$ indic. in the complement clause of the object noun phrase.

(30)e.i. *Kuti Deni' átakure tsága iri zvinoratidza kana ákásimba.

- ii. *Kana Deni' akatakura tsága iri zvinoratidza kana ákásimbá.
 iii. *Deni' kutakura tsága iri zvinoratidza kana ákásimbá.
 iv. *Kuti Deni' átakura tsága iri zvinoratidza kana ákásimbá.
 v. *Kana Deni' átakura tsága iri zvinoratidza kana ákásimbá.

The rough underlying structure of all these sentences is shown in (31).



If kuti $\left[\begin{smallmatrix} + \\ - \end{smallmatrix} \text{indicative} \right]$ is selected and inserted into both S_1 and S_2 we eventually come up with sentence (30a.iv). But as can be seen in (30a.i - iii and v) kuti $\left[\begin{smallmatrix} + \\ - \end{smallmatrix} \text{subjunctive} \right]$, kana $\left[\begin{smallmatrix} + \\ - \end{smallmatrix} \text{consecutive} \right]$, ku $\left[\begin{smallmatrix} + \\ - \end{smallmatrix} \text{infinitive} \right]$ and kana $\left[\begin{smallmatrix} + \\ - \end{smallmatrix} \text{participial} \right]$ respectively may also be inserted into S_1 , while only kuti $\left[\begin{smallmatrix} + \\ - \end{smallmatrix} \text{indicative} \right]$ may be inserted into S_2 . The ungrammaticality of the sentences in (30b - e) bears this out. So, as was stated above, in specifying the rule features of the verb -ratidza it has to be stated somehow that while kuti $\left[\begin{smallmatrix} + \\ - \end{smallmatrix} \text{indicative} \right]$ may be selected for the complement S in both the subject NP and the object NP, kuti $\left[\begin{smallmatrix} + \\ - \end{smallmatrix} \text{subjunc.} \right]$, kana $\left[\begin{smallmatrix} + \\ - \end{smallmatrix} \text{consecutive} \right]$, ku $\left[\begin{smallmatrix} + \\ - \end{smallmatrix} \text{infinitive} \right]$ or kana $\left[\begin{smallmatrix} + \\ - \end{smallmatrix} \text{participial} \right]$ may be inserted only into a complement S of the subject NP with this verb.

The discussion in this section has brought into the open the

following problems with respect to the transformational hypothesis:

(a) complementizers are after all not devoid of semantic content as they have often been claimed to be; (b) the structural description of any complementizer insertion transformation cannot not be limited to a complement clause, but must include the verb which that clause complements; (c) a verb may have as its selectional restriction both an abstract subject NP with a complement S and an abstract object NP also with a complement S. In some cases these complement sentences may have different complementizers as in (30a.i); (d) it is not uncommon to find that when two complementizers occur in one and the same sentence one complementizer will be limited to one complement clause while the other will not be so limited. This is the case in (28a.ii - iii) for instance. The question which cries out for an answer is how are these facts to be incorporated into rule features? All these shortcomings are a natural consequence of the transformational hypothesis. It is clear therefore that the distribution of complementizers in Shona cannot be adequately described under the transformational hypothesis of complementizer insertion.

4.3 The Phrase Structure Hypothesis

From the discussion in 4.2 it is evident that complementizer selection is the kind of phenomenon which is characteristic of subcategorization and that in fact some aspects of complementizer choice cannot be described within the framework of the transformational hypothesis without extending it in undesirable ways.

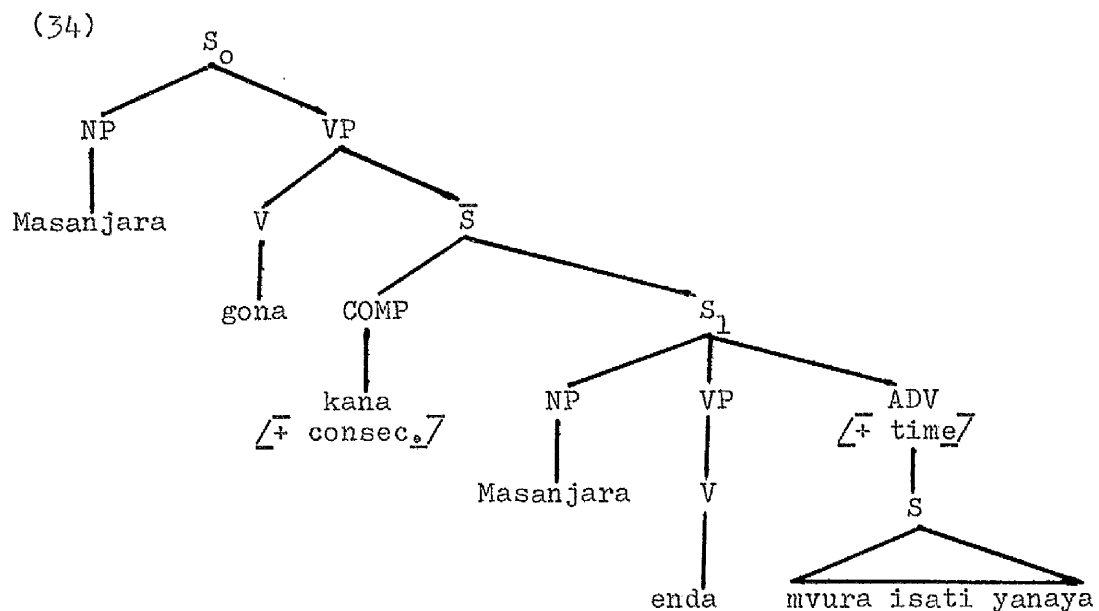
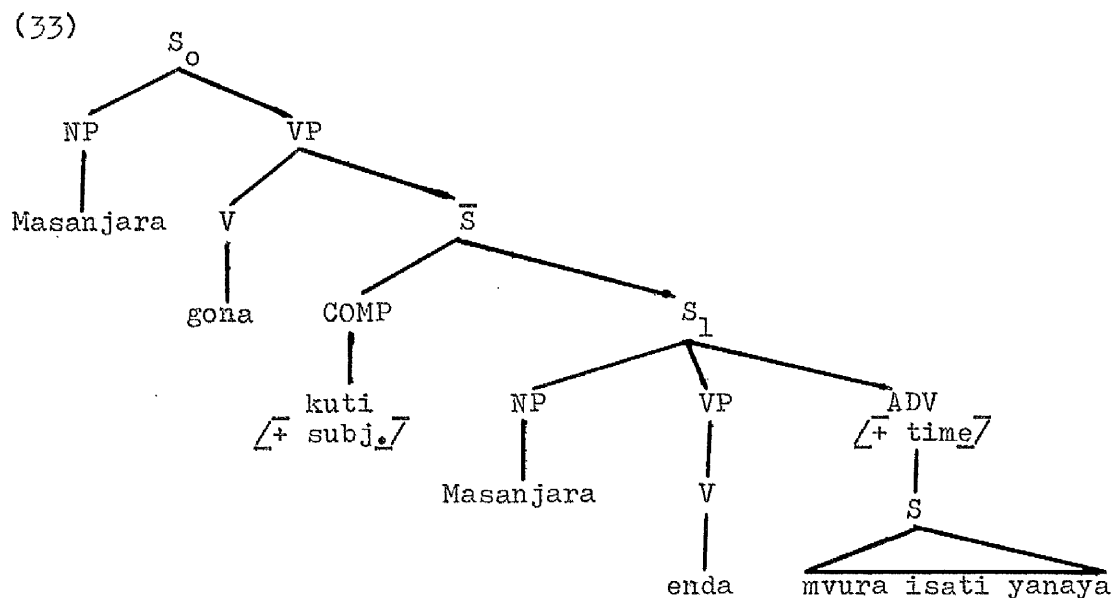
In an attempt to overcome the problems which arise from adopting the transformational hypothesis as discussed above it is proposed here to adopt Bresnan's approach and regard complementizers as specified in deep structure.⁹ Bresnan called it the "phrase structure hypothesis".

9. op. cit. p. 300

She claims that there exists a phrase structure rule in every language having complementizers which permits complement types to be distinguished in deep structure. She set up the following rule for English:

$$(32) \bar{S} \longrightarrow \text{COMP} + S$$

This rule seems to work equally well for Shona. According to this approach the individual sentences in each of the pairs in (7) - (12) would have each its own underlying structure. For example, (7a) and (7b) would have roughly the following underlying structures in (33) and (34) respectively.



With this approach rule features become an unnecessary artifice with regard to complementizers. The point to note here is that since the phrase-structure hypothesis specifies that complementizers exist in deep structure, verbs may be subcategorized for the type of complementizer which they permit in their complement clauses. For instance, in the case of the verb -gona in (7a) above we can say that it takes a complement clause which is introduced by kuti [$\bar{+}$ subjunctive], and in the case of (7b) the same verb takes a complement clause which is introduced by kana [$\bar{+}$ consecutive].

When I discussed the data presented in (28) and (30) certain facts emerged which the transformational approach could not adequately handle. For instance, there was the fact that in (28) the complement clause of the subject NP may have either ku [$\bar{+}$ infinitive], or kana [$\bar{+}$ participial], or kana [$\bar{+}$ consecutive], or kuti [$\bar{+}$ subjunctive], while the complement clause of the object NP is restricted to either ku [$\bar{+}$ infinitive] or kuti [$\bar{+}$ subjunctive] only. If we do not set up a node like COMP in deep structure, we would not be able to describe these facts by the use of the usual rule features or by any other known transformational device. The point is, if a complementizer insertion transformational rule operated in (28a - e), it would have to be sensitive, not only to the rule feature on the verb, but also to the subcategorization of the verb -kónzera'. That is, ku [$\bar{+}$ infinitive] and kuti [$\bar{+}$ subjunctive] may be inserted into a complement clause which is in either the subject or object position, while kana [$\bar{+}$ participial] and kana [$\bar{+}$ consecutive] may only be inserted into a complement clause which is in a subject position. If complementizers are going to subcategorize verbs, the question is how is this to be formalized?¹⁰ For the moment it seems to be an open

10. One way, I suppose, might be to adopt the approach which is presented in rough below. Taking (7) and (13) as illustrative examples, the

question.

Let us examine more closely the sentences in (28a.i and iv) and (30a.i and iv) which are repeated here as (35) and (36) for convenience.

(35)a. Kuti murúmé némukádží vágaré vachírwa zvinokónzera kuti varambane.

b. *Kuti murúmé némukádží vágára vachírwa zvinokónzera kuti varambane.

(36)a. Kuti Deni' atakúre tsága iri zvinoratidza kuti akásimba.

b. Kuti Deni' atákura tsága iri zvinoratidza kuti akásimba.

These sentences present a problem. Notice that (35b) is ungrammatical.

In this sentence the complement clause of the subject NP has kuti $\left[\begin{smallmatrix} + \\ + \end{smallmatrix} \text{indicative} \right]$ while the complement clause of the object NP has kuti $\left[\begin{smallmatrix} + \\ + \end{smallmatrix} \text{subjunctive} \right]$. But (36a) in which these two complementizers are reversed is perfectly well-formed. In (35a) the complement clauses of both the subject and

verb -gona in (7a -b) and (13b) will be regarded as one verb and that in (13a) as another. This sounds perfectly sensible since the two differ in their meanings. The former may be entered in the lexicon as:

-gona $\left[\begin{smallmatrix} + \\ + \end{smallmatrix} \text{V}, + \text{S} \right]$; $\left[\begin{smallmatrix} + \\ + \end{smallmatrix} \text{_____kuti} + \text{subjunctive} \right]$; $\left[\begin{smallmatrix} + \\ + \end{smallmatrix} \text{_____kana} + \text{consec} \right]$ and the latter as:

-gona $\left[\begin{smallmatrix} + \\ + \end{smallmatrix} \text{V}, + \text{NP} \right]$; $\left[\begin{smallmatrix} + \\ + \end{smallmatrix} \text{_____ku} + \text{infinitive} \right]$ S.

In the case of the first -gona this is to be interpreted as follows: this verb is followed by a complement S. This complement S must have either kuti $\left[\begin{smallmatrix} + \\ + \end{smallmatrix} \text{subjunctive} \right]$ or kana $\left[\begin{smallmatrix} + \\ + \end{smallmatrix} \text{consecutive} \right]$, but not both.

There should be no problem here because in the grammar it will be specified that complementizers are mutually exclusive as has already been stated. As for the second -gona, it occurs in the environment before NP. Concerning what follows NP, namely, $\left[\begin{smallmatrix} + \\ + \end{smallmatrix} \text{ku} \left[\begin{smallmatrix} + \\ + \end{smallmatrix} \text{infinitive} \right] \text{S} \right]$, this is to be interpreted as follows: the complement of this verb is an abstract NP which contains a complement clause.

the object have the same complementizer, namely, kuti /+ subjunctive/. The same applies to (36b); both complements have kuti /+ indicative/. The problem centres on (35b) and (36a). It would appear that there are interdependencies between complements which have an effect on the selection of a complementizer. With regard to these two sentences (i.e. 35b and 36a) it seems to be the case that when kuti /+ indicative/ occurs in the subject, kuti /+ subjunctive/ cannot occur in the object. However, the reverse is not true as is indicated by the grammaticality of (36a) in which the subject complement clause has kuti /+ subjunctive/ while the object complement clause has kuti /+ indicative/. Below are further examples of sentences which illustrate this point. The sentences in (37) and (38) correspond to those in (35) and (36) respectively.

(37)a.i. Kuti m^uswere^e ma^kaga^ra zviⁿoita kuti basa ri^rege^e ku^uenderera mberⁱ.

(If you spend the day loafing there will be no progress in the work.)

ii. *Kuti masw^era ma^kaga^ra zviⁿoita kuti basa ri^rege^e ku^uenderera mberⁱ.

b.i. Kuti va^aende^e kum^ba i^ye zviⁿo zviⁿovabatsira kuti va^saniwe^e.

(If they go home now it will save them from the rain.)

ii. *Kuti v^aoenda kum^ba i^ye zviⁿo zviⁿovabatsira kuti va^saniwe^e.

c.i. Kuti u^uchovhe^e ma^kasa zviⁿokurunzira kuti u^uite^e ubhinya.

(If you gamble with playing cards it will lead you into being a savage.)

ii. *Kuti un^ochovha ma^kasa zviⁿokurunzira kuti u^uite^e ubhinya.

d.i. Kuti un^yarare^e zviⁿokunda kuti ut^ukane^e naye^e.

(For you to keep quiet will be much better than quarrelling with him.)

ii. *Kuti un^onyarara^e zviⁿokunda kuti ut^ukane^e naye^e.

(38)a.i. Kuti a^uye^e kuⁿo zviⁿoreva^e kuti aⁿoda mu^kadzi wake^e.

(For him to come here means that he loves his wife.)

ii. Kuti ákauyá kúnó zvinóreva kuti anodá mukádzi wake.

(That he came here means that he loves his wife.)

b.i. Kuti vásiyé imba yedu isina munhu zvinotaura kuti havatende.

(For them to leave our house unattended shows that they are ungrateful.)

ii. Kuti vakasiya imba yedu isina munhu zvinotaura kuti havatende.

(The fact that they left our house unattended shows that they are ungrateful.)

If a node like COMP is not set up, then verbs cannot be subcategorized for complementizers. As has already been pointed out this would necessitate an extension of the transformational theory in undesirable ways. For instance, a complementizer insertion transformation would have to refer first to the verb in the higher S. But in some cases it would have to refer also to a complementizer already placed on another complement of the verb during the same cycle as was the case in (29) and (31) above.

Such interdependencies are however typical of subcategorization. To this end consider a few sentences in which the verb -ita (make) occurs.

(39)a. Kuti mugare chete zvinoita kuti muve nenungo.

(that - you sit - only - it makes - that - you have - laziness = For you to be idle will make you lazy.)

b. Semení akaita vana vake.

(Semeni - begot - children - her =
Semeni had her children.)

c. Semení akaita kuti vana vake vafunde.

(Semeni - made - that - children - her - they learn=
Semeni educated her children.)

d. *Kuti Semení afunde zvakaíta vana vake.

(*That Semeni should learn made her children.)

e. Kuti Sēmeni' áfunde zvákáita kuti babá waké áténgesé mómbe.

(that - Semeni - she learn - it made - that - father - her-
he sell - cattle = For Semeni to be educated her father
had to sell his cattle.)

We note that in (a) and (e) both the subject and the object are noun phrases of the type (N + S), in (b) both the subject and the object are human noun phrases, in (c) the subject NP is human while the object is an abstract NP of the type (N + S), and in (d), which is ungrammatical, the subject is an abstract NP of the type (N + S) while the object NP is human. What this signifies is that with certain verbs object noun phrases other than those of the type (N + S) are not permitted when they (i.e. the verbs) have subject noun phrases with an embedded complement clause. This is illustrated in (39d) and (39e).

Those verbs which have multiple sentential complements offer compelling evidence for setting up a COMP node in deep structure, for they appear to be subcategorized for types of complements as was demonstrated above. There is yet another strong argument for setting up COMP as a node in deep structure. This argument relates to the interaction of complementizers with other transformations.

One transformation which clearly interacts with complementizers is Conjunction Reduction. As an illustration of how this rule operates consider (40) and (41).

(40) Badza' naMaténzeni' vaenda Haráre.

(Badza and Matenzi went to Harare.)

(41) Badza' aenda Haráre na Maténzeni' aenda Haráre.

(Badza went to Harare and Matenzi went to Harare.)

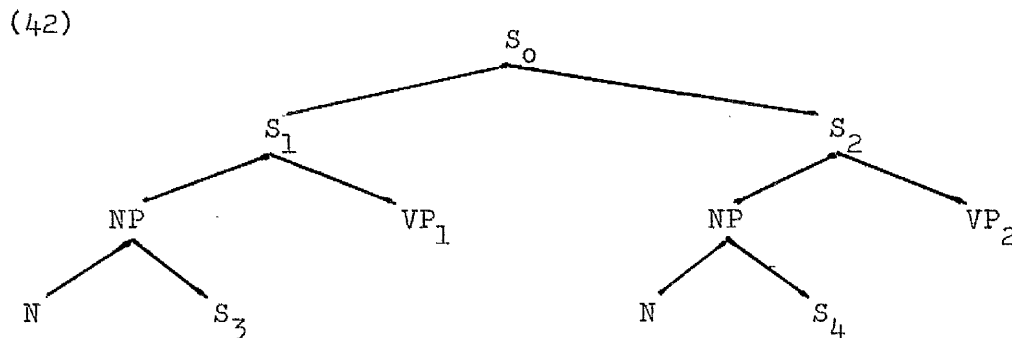
Through Conjunction Reduction (40) is derived from (41). This rule, which is cyclic, must precede on each cycle the cyclic transformation of gender copying. The sentences in (40) and (41) clearly illustrate this point.

Note that (41) is a paraphrase of (40). In (41) Badza' and Maténzeni' each

controls a singular concord, namely, the underlined a. But in (40), because the two noun phrases have now been joined together, they control as one entity the plural concord va which is also underlined.

The crucial argument here is that if complementizers were not distinguished in deep structure, but rather treated as being inserted transformationally, some grammatical conjoined sentences would not be generated. But if complementizers are specified in deep structure, then these sentences are generated with ease using familiar rules.

Assuming that complementizers are introduced transformationally, the way complementizer insertion and conjunction reduction interact depends largely on the tree configuration to which they are applied. One possible such structure is the one in (42).



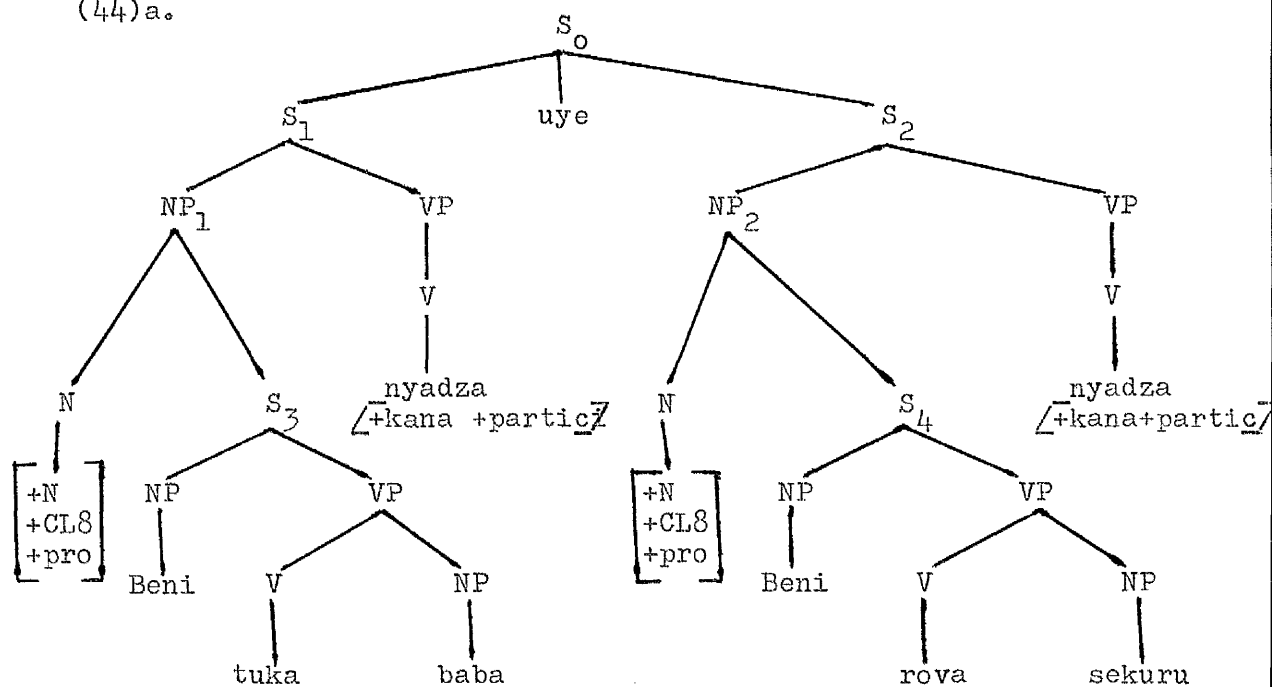
With the transformational hypothesis the earliest point at which complementizer insertion can apply in the configuration above is S_1 (or S_2) since it must be sensitive to the rule feature on the V in VP_1 (or VP_2). Now notice that conjunction reduction cannot apply before the S_0 cycle. Let us illustrate this with an actual sentence.

(43) Kana Bēni ákatúka babá úye kana ákaróva sekúru zvínonyádzá.

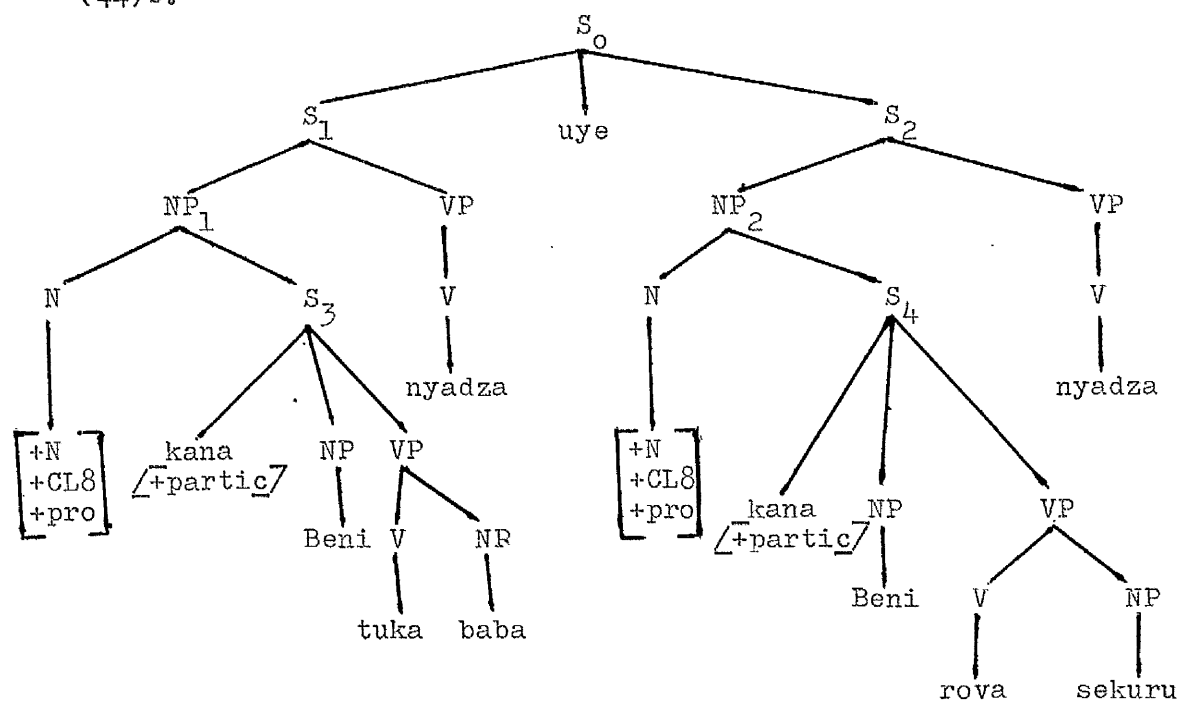
(If Ben scolded his father and if he beat his uncle it was a disgrace.)

The underlying structure of this sentence is something like (44a).

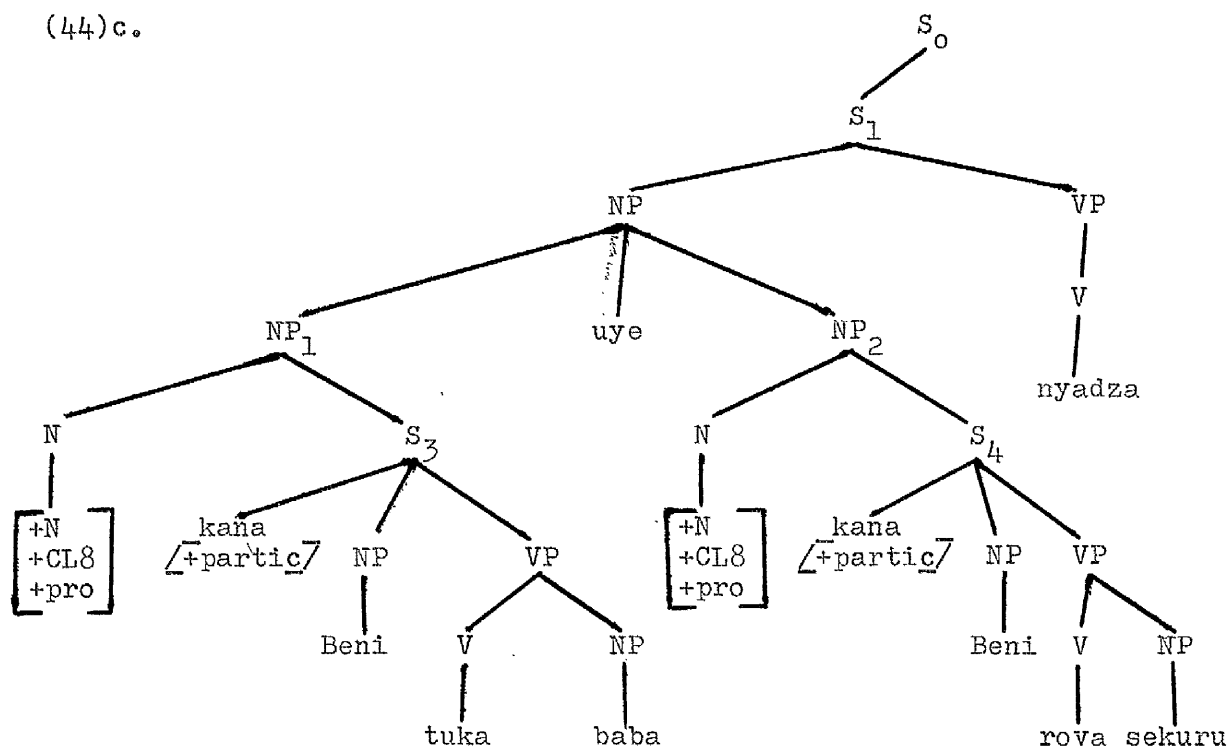
(44)a.



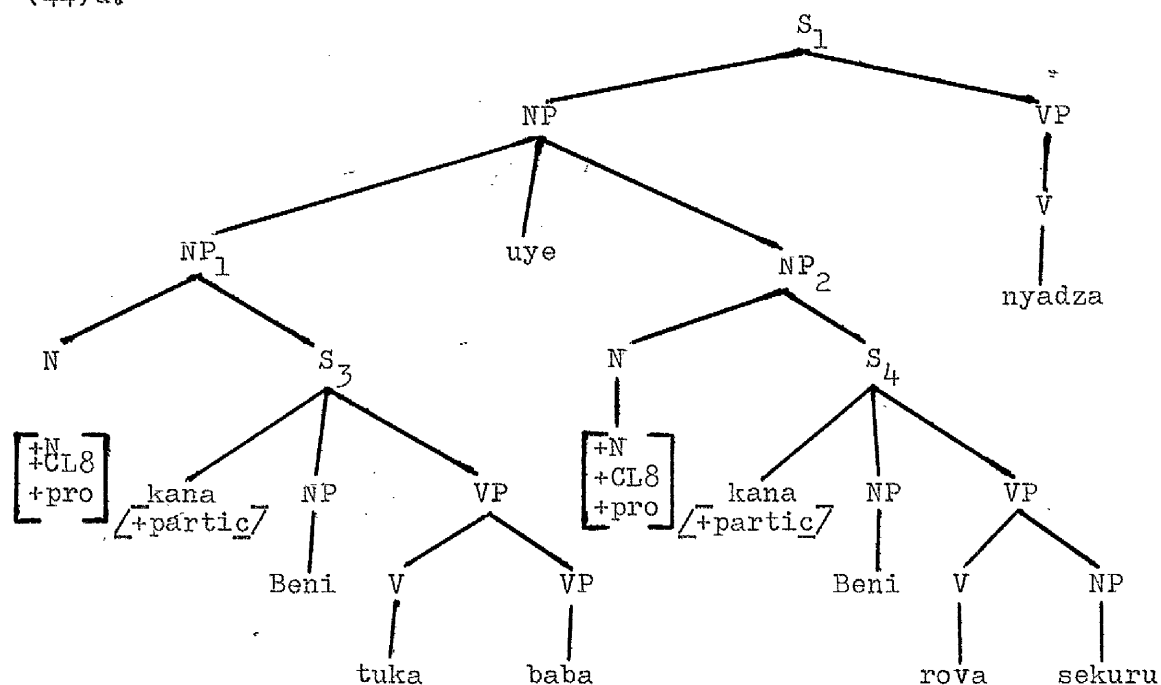
(44)b.



(44)c.



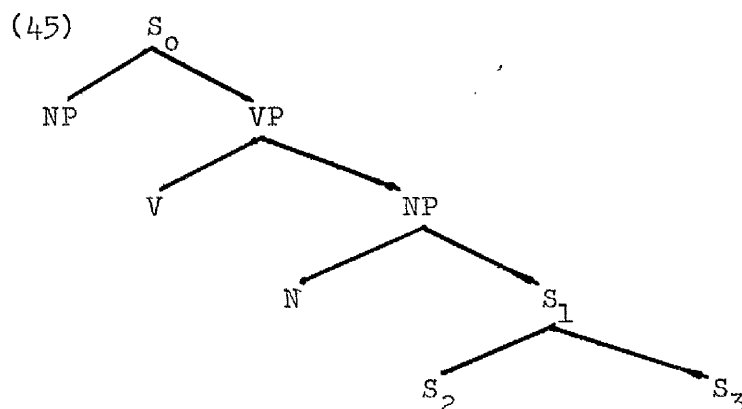
(44)d.



No transformational rules apply when S_3 and S_4 are cycled. As we move on to S_1 (and also S_2) kana [+partic] is inserted into S_3 (and also

S_2) kana [$\bar{+}$ participial] is inserted into S_3 (and also S_4). This is shown in (44b). Now that it is known that S_3 (and also S_4) will be in the participial mood, gender copying can apply to S_3 and also S_4 . Notice that the VP constituent in S_1 is identical to that in S_2 . At this stage conjunction reduction applies, yielding the configuration in (44c). The subject NP of S_4 is then deleted under identity with the subject NP of S_3 . The head noun of NP_1 and that of NP_2 then together control the plural concord zvi as gender copying applies to S_1 . Note that apart from NP_2 the rest of the S_2 node disappears as a direct consequence of the conjunction reduction rule. Since, after conjunction reduction has applied, S_0 no longer branches, it is deleted by the convention which delete any S node which does not branch.¹¹ This results in (44d). After applying later rules which are not crucial to the present discussion we eventually obtain sentence (43).

In the case which has just been considered above complementizer insertion preceded conjunction reduction. However, There are instances in Shona when conjunction reduction precedes complementizer insertion in a derivation, as for example in the structure like that sketched in (45) below.



11. For a discussion on S-pruning see John R. Ross in "A Proposed Rule of Tree-pruning" in Modern Studies in English, David A. Reibel and Sanford A. Schane (editors).

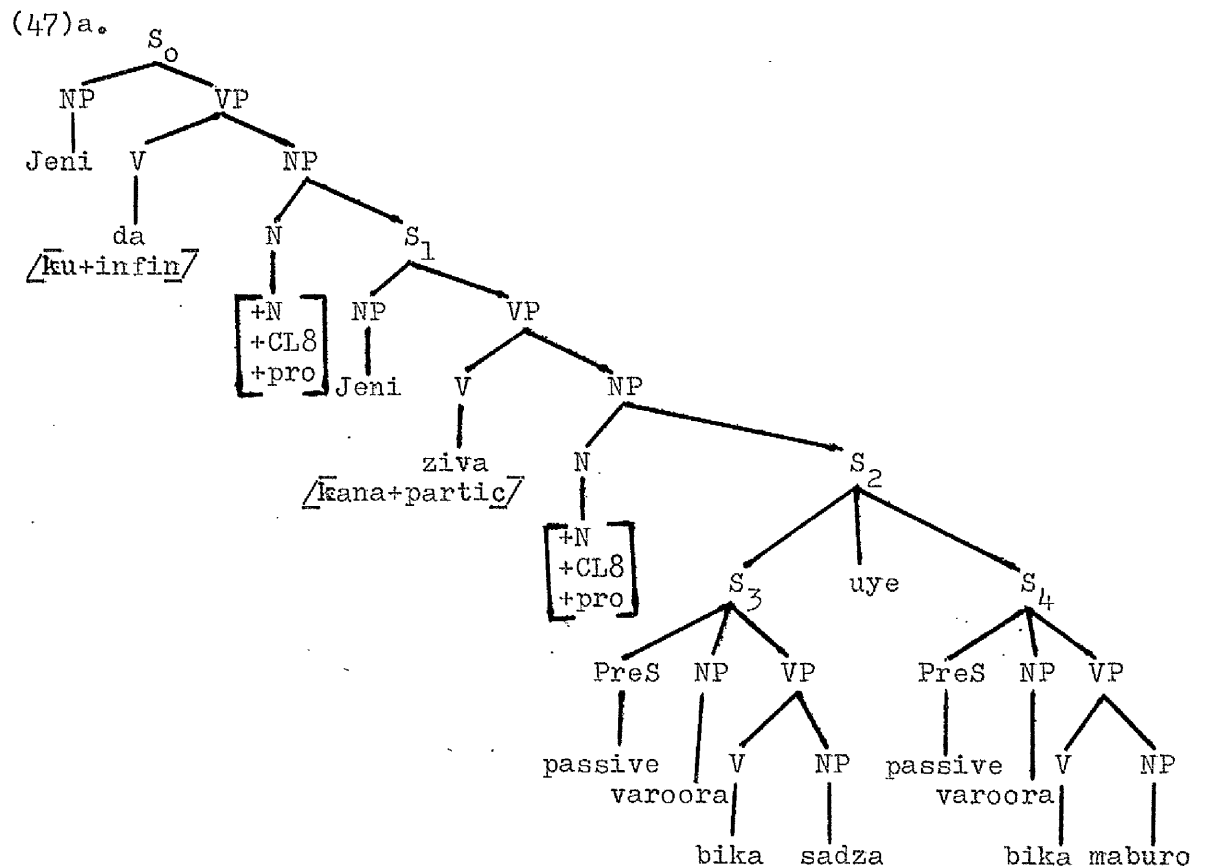
In this diagram the structural description of conjunction reduction is met at S_1 , but the structural description of complementizer insertion reduction is not met until S_0 is cycled. Here then is a situation where conjunction will obviously have to apply before complementizer insertion in a derivation.

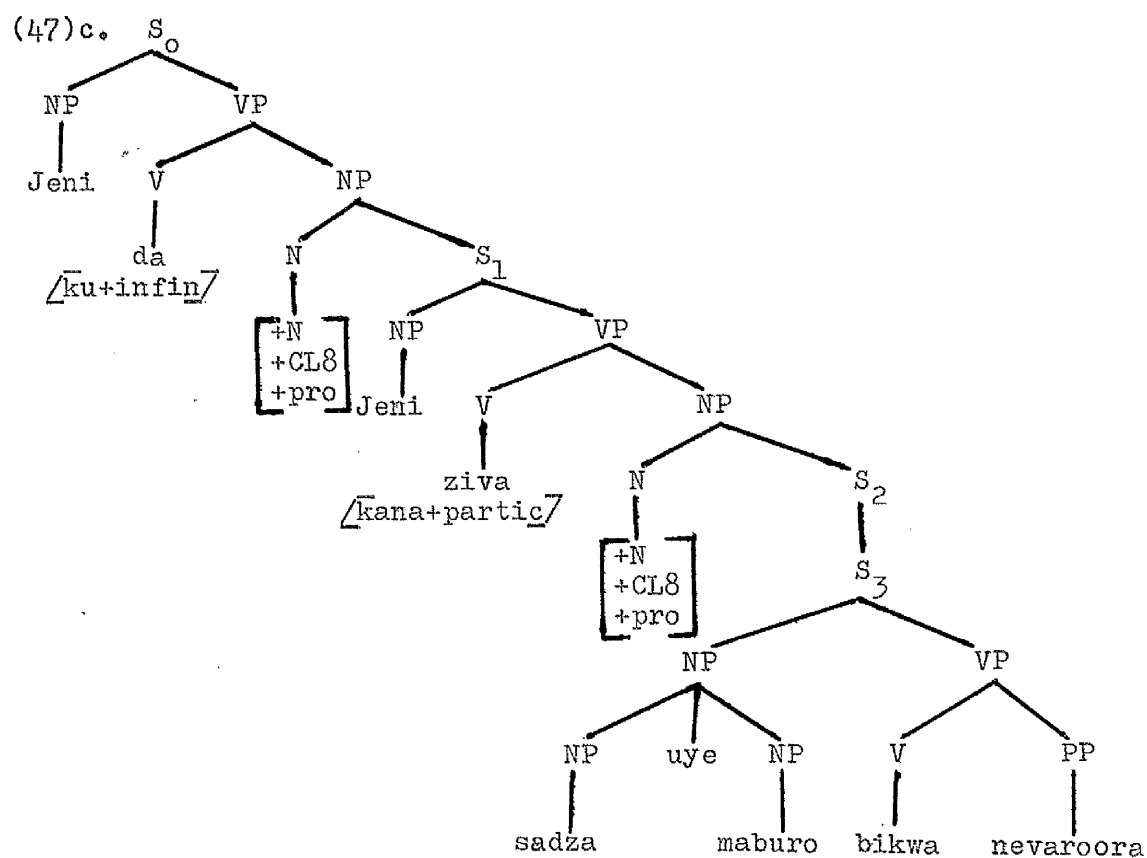
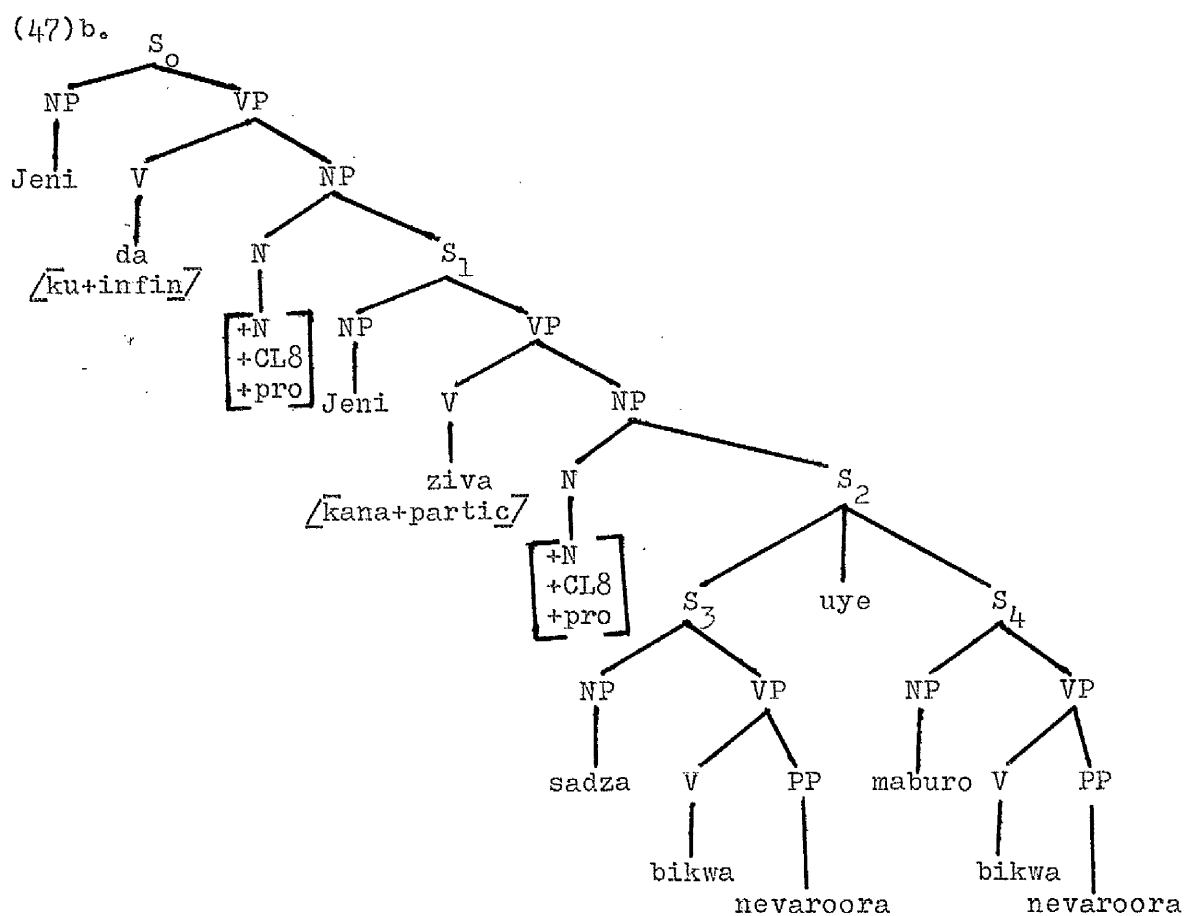
As an illustration consider the derivation of (46).

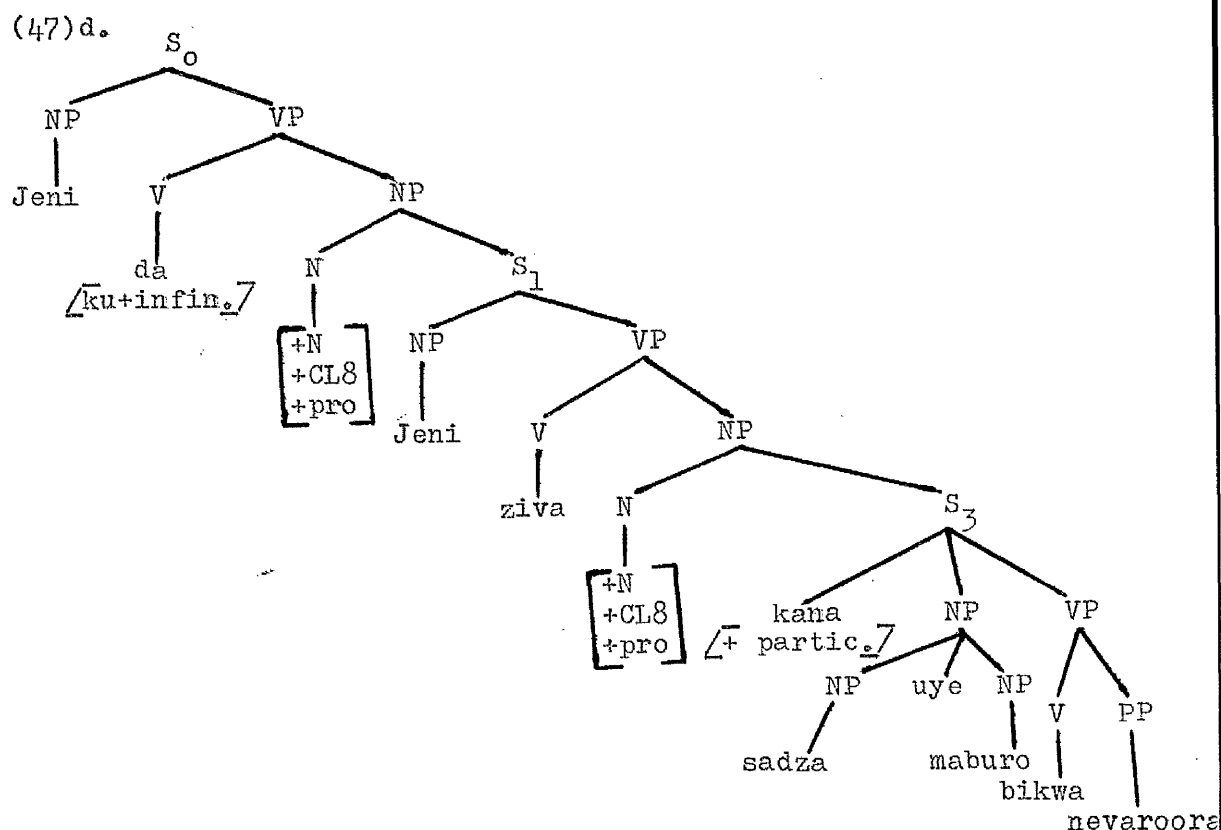
(46) Jeni' anodá kuzi'vá kana sadza uye kana maburo zvábikwá. névaróóra.

(Jeni wants to know whether the sadza and whether the sweet beer have been prepared by the daughters-in-law.)

The structure which underlies this sentence would look something like (47a) below.







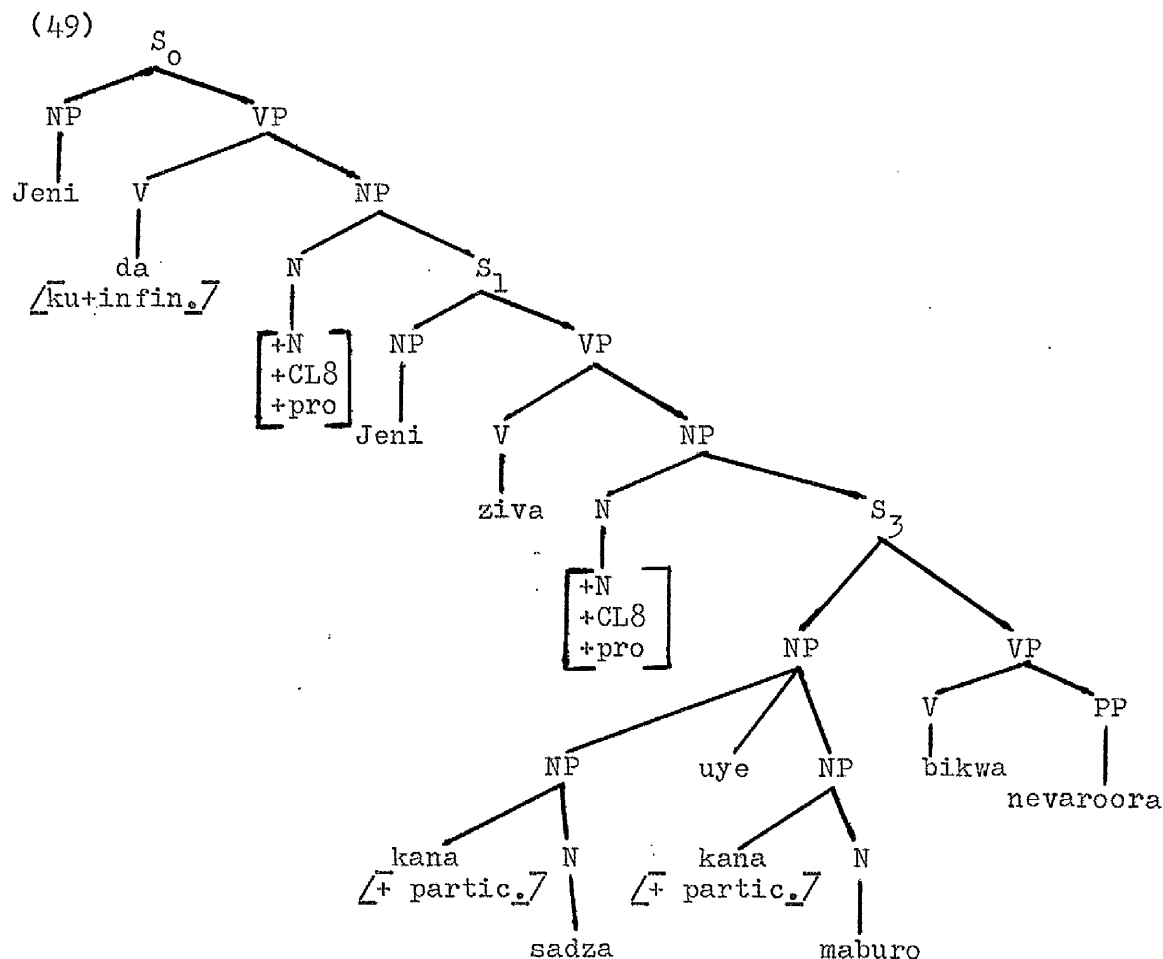
When S_3 and S_4 are cycled the passive rule is applied yielding (47b). We notice that complementizer insertion cannot apply on S_3 or S_4 because of the nature of the next higher node, namely, S_2 . However in the second cycle, i.e. S_2 , the structural description of conjunction reduction is met. Applying this rule the result is the intermediate structure in (47c). The S_2 node then disappears by the pruning convention mentioned above. At this point complementizer insertion can apply and the tree which results after its application is (47d). After applying later rules the sentence which ultimately results is (48).

(48) Jeni' anodá kuzivá kana sadza uye maburo zvbikwá névaróóra.

(Jeni wants to know whether the sadza and the sweet beer have been prepared by the daughters-in-law.)

Notice that this sentence, though grammatical, is not the same as the one in (46) above. There is some difference in connotative meaning between (46) and (48). In (46) the sadza and the maburo seem to be more

focussed than they are in (48). The point however is that there is no way in which complementizer insertion can produce (46) from the structure in (45) and (47). If we cling to the transformational hypothesis we could, I suppose, allow complementizer insertion to apply when S_1 is cycled as in (47d) and set up a later rule which optionally distributes a complementizer preceding a conjoined structure over the conjoined noun phrases. Such a rule would allow us to derive (49) from (47d).



This distribution of the complementizer over the co-ordinate structure in (47d) would eventually result in the derivation of (46). Allowing such a rule creates problems elsewhere. For one thing it cannot be said to be optional because, as has already been pointed out, (46) and (48) have different pragmatic interpretations. If we allow it to be an obligatory rule such a solution would permit (50) to be transformed into

(51) which is an ungrammatical sentence.

(50) Ndinozi^ívá kúti Deni^í naFani^í vákásángana.

(I know that Deni and Fani met.)

(51) *Ndinozi^ívá kúti Deni^í nekúti Fani^í vákásángana.

(*I know that Deni and that Fani met.)

In (50) we have a reciprocal predicate which cannot be derived through conjunction reduction. Thus (50) cannot be said to derive from (52).

(52) *Ndinozi^ívá kúti Deni^í ákásángana nekúti Fani^í ákásángana.

(*I know that Deni met and that Fani met.)

The conclusion to be drawn from this is that this ad hoc complementizer distribution rule would have to apply only in those cases where conjunction reduction will have applied. But the drawback is that after conjunction reduction has applied the conjoined noun phrases can hardly be distinguished, if at all, from the non-reduced cases of NP conjunction.¹²

The crucial point here is that if the complementizers in (46) are present before conjunction reduction applies, their derivation is accounted for without any difficulty. But with the transformational hypothesis there does not seem to be a satisfactory way in which (46) could be derived. The argument concerning the interaction of complementizers with conjunction reduction appears to prove beyond doubt that complementizers ought to be specified in deep structure rather than introduced transformationally.

Questions in Shona may be embedded in higher sentences just as in many other languages. The following are examples of some common types of simple unembedded questions in Shona. The interrogative formatives are underlined in each question. (For embedded and non-embedded questions

12. For a discussion on conjuncts see G.Lakoff and S.Peters in "Phrasal Conjunction and Symmetric Predicates" in Modern Studies in English, David A.Reibel and Sanford A.Schane (editors). p.113 - 142.

see also 2.5.1 and 2.5.2)

(53)a. Béni ákádʒóka here?

(Beni - he came back - question = Did Ben come back?)

b. Changúfu ánobva kúpi?

(Changufu - comes - from where = Where does Changufu come from?)

c. Hazvíná ákáenda Haráre néyi?

(Hazvina - went - Harare - with what =
With what did Hazvina go to Harare?)

d. Nzou yakáita séyi?

(an elephant - be - like what =
What does an elephant look like?)

e. Séyi wakátiza?

(why - you ran away = Why did you run away?)

f. Swiza inodya chíyi?

(a giraffe - eats - what = What does a giraffe eat?)

g. Sará árova aní?

(Sara beat whom = Whom did Sara beat?)

When these sentences occur as indirect questions, that is when they occur as embedded questions, the complementizer employed is usually kuti [+ indicative] as the sentences in (54) show.

(54)a. Ndinodá kuzívá kuti Béni ákádʒóka here.

(I want to know whether Ben came back.)

b. Ndinodá kuzívá kuti Changúfu ánobva kúpi.

(I want to know where Changufu comes from.)

c. Ndinodá kuzívá kuti Hazvíná ákáenda Haráre néyi.

(I want to know what means Hazvina used to go to Harare.)

d. Ndinodá kuzívá kuti nzou yakáita séyi.

(I want to know what an elephant looks like.)

e. Ndinodá kuzívá kuti séyi wakátiza.

(I want to know why you ran away.)

f. Ndinoda' kuzi'vá kúti swiza inodya' chii'.

(I want to know what a giraffe eats.)

g. Ndinoda' kuzi'vá kúti Sara' arova ani'.

(I want to know who Sara beat.)

Although there are many verbs which permit a complement clause which has kuti [+ indicative], not every one of them will allow an embedded question.

(55)a.i. *Tichaona anodáirá kúti zvinhu zvése' zvichanaka heré.

(*Tichaona believes whether everything will be all right.)

ii. *Baba' anofungidzira kuti mwana' wáké anosvika nhási heré.

(*The father expects whether his child will arrive today.)

iii. *Mwana' akanganisa kuti átuka amái heré.

(*The child made a mistake whether she scolded her mother.)

iv. *Taka' ári kúshora kuti VaMago vakatiza' mhuri yávo heré.

(*Taka is blaming whether Mr.Mago deserted his family.)

In the sentences in (55a) the interrogative formative heré is questioning the embedded clause. But if this interrogative formative is made to question the whole sentence, these sentences become fully well-formed.

(55)b.i. Tichaona anodáirá kúti zvinhu zvése' zvichanaka heré?

(Does Tichaona believe that everything will be all right?)

ii. Baba' anofungidzira kuti mwana' wáké anosvika nhási heré?

(Does the father expect his child to arrive today?)

iii. Mwana' akanganisa kuti átuka amái vaké heré?

(Did the child make a mistake by scolding her mother?)

iv. Taka' ári kúshora kuti VaMago vakatiza' mhuri yávo heré?

(Is Taka deploring the fact that Mr.Mago deserted his family?)

That verbs can be subcategorized according to whether they can permit indirect questions or not is a well known phenomenon.

As was pointed out earlier one thing peculiar to complementizers is that they are mutually exclusive. The following sentences contain

two complementizers each, and these are underlined.

(56)a. *Handizívé kúti kana ákauya.

(*I do not know that whether he came.)

b. *Vánodá kúti kuenda kumushá.

(*They want that to go home.)

c. *Jojo ákati' kana Ø áizotóra ushé nésimba.

(*George said whether that he would seize the chieftainship
by force.)

But the sentence in (57) below appears to be a counter-example to this claim.

(57) Handizívé kana kuti áchásvika pánó heré nhási.

(I do not know whether (that) he will arrive here today =

I do not know whether he will arrive here today.)

In this sentence we have kana and kuti immediately following each other.

As was stated earlier kana as a complementizer is followed by a clause in either the participial mood or the consecutive mood, while kuti is followed by one in either the indicative mood or the subjunctive mood.

In (57) the complement clause is in the indicative mood, clearly indicating that the complementizer here is kuti [$\bar{+}$ indicative]. That being the case what then is the status of kana in this sentence? Note that kana here can be left out without altering the meaning of this sentence.

(58) Handizívé kuti áchásvika pánó heré nhási.

(I do not know whether he will arrive here today.)

Here are further examples of sentences of this type. The (i) sentences below correspond to (57) and the (ii) sentences to (58).

(59)a.i. Paákásangana neshumba ákashaya kana kuti óita séyi.

ii. Paákásangana neshumba ákashaya kuti óita séyi.

(When he came face to face with a lion he was at a loss
as to know what to do.)

b.i. Hamenó kana kuti Kondo ákadyei; áonda chaizvo.

ii. Hamenó kúti Kondo ákadyéi; áonda chaízvo.

(I do not know what Kondo ate; he has lost a great deal of weight.)

c.i. Zvandákanzwa nyaya iyi ndakábva ndáshaya kana kúti ndóitei.

ii. Zvandákanzwa nyaya iyi ndakábva ndáshaya kúti ndóitei.

(When I heard this story I did not know what to do.)

In the following sentence (60) the second kana does not seem to be a complementizer but is rather a conjunction of some kind.

(60) Handizivé kana kúti áchásvika pánó heré nhási kana kúti haáchásvika.

(I do not know - whether - that - he will arrive - here - today - or - that - he will not arrive =

I do not know whether or not he will arrive here today.)

While the first kana in this sentence is optional as we saw above, the second one is obligatory.

(61)a. Handizivé kúti áchásvika pánó heré nhási kana kúti haáchásvika.

b. *Handizivé (kana) kúti áchásvika pánó heré nhási kúti haáchásvika.

It seems quite evident that the second kana is serving to co-ordinate the two embedded complement clauses. The status or function of the first kana however still remains unclear. If the argument that complementizers in Shona normally have moods associated with them is valid, this kana then is not a complementizer formative since none of the moods associated with it is reflected in the complement clause. Moreover, the fact that its occurrence in such sentences is optional strongly suggests that it is not a complementizer, as normally¹³ complementizer formatives are

13. I say "normally" because there are a few cases when a complementizer seems to be deleted from an embedded sentence (see 6.1.1.4).

either obligatorily present in the case of embedded sentences or obligatorily deleted in the case of non-embedded sentences.¹⁴ Notice also that kana as a lexical item has a multiplicity of meanings; among them are: when; if; although; even if; or; whether ----- or. In the absence of any compelling evidence that it is a complementizer formative in the case under discussion, I take the view that it is not a complementizer here although the question is probably an open one. In this case the claim made on p. 168, namely, that complementizers are mutually exclusive, holds.

We observe also that where complementizers consist of an overt formative and a mood, with the exception of ku and zva, the formative may occur in either a clause-initial position or a position immediately after the subject NP. It seems that the occurrence of the subject NP of the complement clause before the complementizer formative can be accounted for by an optional transformational rule which interchanges them. The examples in (62) and (63) illustrate the occurrence of complementizer formatives in clause-initial position while those in (64) and (65) illustrate their occurrence in a non-clause-initial position. The complementizer formatives are underlined in each case.

(62) subject complementation;

a. Kana madzimái ákatúkaná pamberí páámambo zvákanyadzá.

(If the women scolded each other in front of the chief it was a disgrace.)

b. Kana sekúru akasvika kunzé kwáendá hazvíchabátsírá nokúti basa rácho rínofanírá kuitwa kuchiri kuchena.

(If uncle arrives late in the night it will not help us because the ritual has to be done before it is dark.)

14. This applies if one goes on the assumption that every sentence has a complementizer in its deep structure. (see also 4.4 below.)

c. Kuti nyika yákaténderéra zvinozivikanwa.

(That the world is round is known.)

d. Kuti mwana áchate zvinofadza vabereki.

(For a son/daughter to wed pleases his/her parents.)

(63) object complementation;

a. Ndabvunza kana Farai akadzoka kuWedza.

(I asked whether Farai came back from Wedza.)

b. N'anga iye ichazvibata chete kana Gondwe akasaidzira mudzimu wacho kwatiri.

(That witch-doctor will be able to detect it even if Gondwe incites the spirit to turn against us.)

c. Tinoziva kuti nyika yákaténderéra.

(We know that the world is round.)

d. Mubereki wose anoda kuti mwana wake áchate.

(Every parent wants his/her son/daughter to wed.)

The meanings of the sentences in (64) and (65) below are the same as those of the corresponding sentences in (62) and (63) above.

(64) subject complementation with complementizer formative in a non-clause-initial position;

a. Madzimai kana akatukana pamberi pamambo zvakanadzwa.

b. Sekuru kana akavika kunze kwaenda hazvichabatsira nokuti basa racho rinofanira kuitwa kuchiri kuchena.

c. Nyika kuti yákaténderéra zvinozivikanwa.

d. Mwana kuti áchate zvinofadza vabereki.

(65) object complementation with complementizer formative in a non-clause-initial position;

a. Ndabvunza Farai kana akadzoka Wedza.¹⁵

15. This sentence is ambiguous. Farai can be the direct object of the verb -bvunza or it can be the subject of the predicate akadzoka Wedza. Here we are concerned with the latter reading.

b. N'anga iye ichazvibátá chéte Góndwe kana akasaidzira mudzimú wácho kwatiri.

c. Tinoziwá nyika kuti yakaténdérera.

d. Mubereki wóse anodá mwana wake kuti áchaté.

In the case of the complementizer formatives ku and zva, if the subject NP of the complement clause is overtly expressed, they will always occur after it (i.e. subject NP).

(66) Ndyire chaiye kuuya kuzotióná zvinotíshúra.

(For Ndyire to pay us a visit is an ill omen for us.)

(67) Mapondera zvaadzoka akáisa usó pasi' zvinorevá kúti sekuru várwara chaizvo.

(Since Mapondera's face was downcast when he returned it means that uncle is seriously ill.)

Note that complementizer formative ku preceded by a subject NP does not seem to occur in a complement clause which is in an object position, as is indicated by the ungrammaticality of (68).

(68) *Ndinodá mwana kuenda.

(I want the child to go.)

See also the (ii) examples in (170) in Chapter Two.

Notice also that the complementizer formative kana in kana /+ consecutive/ may be optionally deleted without effecting any semantic change.

(69)a. Sekúru akasvika kunzé kwaenda' hazvíchabátsírá nokúti basa rácho rinofanirá kuitwa kuchiri kuchena. (cp 62b and 64b)

b. N'anga iye ichazvibátá chéte Góndwe akasaidzira mudzimú wácho kwatiri. (cp 63b and 65b)

In the case of the other complementizer formatives this optional deletion rule may not apply.

(70)a. *Madzimái akatúkaná pamberi' pamambo zvakanyádza. (cp 62a)

b. *Nyika yakaténdérera zvinozivikanwa. (cp 62c)

- c. *Mwana áchaté zvinofáda vabereki. (cp 62d)
- d. *Ndabvúnza Farái akadzoka kuWedzá. (cp 63a)
- e. *Tinozivá nyika yakaténdérera. (cp 63c)
- f. *Mubereki wose anoda mwana wake áchaté. (cp 63d)

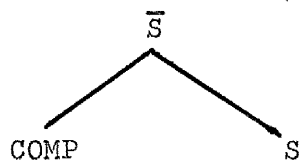
Although (70f) is unacceptable, at least in my idiolect, (71) below, which has a linear sequence of words similar to that of (70f), appears to be acceptable, though marginally.

- (71) Ndinoda Keri asvike pano mangwana³.
 (I want Keri to arrive here tomorrow.)

How is this discrepancy to be accounted for? The answer seems to lie in the fact that while (63d), from which (70f) would derive, expresses a mere wish, (72) on the other hand, from which (71) derives, signifies much more than a wish; it is almost a command. There may be another reason which is not immediately apparent.

4.4 Complementizers and Non-embedded sentences

It is claimed in this study that every sentence, embedded or non-embedded, starts off as \bar{S} in Shona. The implication is that every sentence in Shona has a complementizer which serves to introduce it thus:



The important thing to observe is that in the case of the topmost \bar{S} the complementizer formative will be deleted obligatorily by a convention. This convention may be tentatively stated as follows: delete the complementizer formative from \bar{S}_i just in case \bar{S}_i is the topmost \bar{S} in the derivation. It must be borne in mind that this convention will only be invoked after mood incorporation has applied otherwise the predicate will be left without a mood. That such an approach is necessary becomes obvious if we bear in mind that even the topmost S in a complex sentence

must be in one mood or another. Besides, if mood appears in deep structure under COMP, as has already been stated above, it follows that there must be COMP also to introduce mood into the topmost sentence. The alternative is to say that mood is introduced into the topmost sentence, not by COMP, but by some other rule or process. If the latter alternative (irrespective of its formulation) is adopted, then we shall have a strange situation in which mood is introduced by COMP in some cases but by something other than COMP in other cases. It is clear that by adopting the second alternative our grammar will fail to capture a linguistic generalization, namely, that mood is being introduced into the predicate phrase in either case. Consequently the second alternative will result in a weaker grammar. With the first alternative this linguistic generalization is captured. It may well be that the occurrence of COMP in the topmost sentence as well as the convention suggested above is universal.

4.5 Summary

In this chapter I have tried to show that in Shona (a) complementizers have semantic content ^{therefore} and ~~there~~ they should be specified in deep structure; (b) complementizers subcategorize verbs although it is not clear how this is to be done; (c) these complementizers are mutually exclusive, that is, they are incompatible within the same minimal clause; and (d) complementizers are basically clause-initial, but nonetheless in most cases by a transformation the complementizer formative may permute with the subject NP of the complement clause.

5.0 TRANSFORMATIONAL RULES

In this chapter I should like to discuss the following transformational rules which were mentioned in previous chapters:

Rule (1)	Passive
Rule (2)	Pseudo-passive
Rule (3)	Agent Deletion
Rule (4)	Reflexive
Rule (5)	Mood Incorporation
Rule (6)	Complementizer Placement
Rule (7)	Gender Copying
Rule (8)	Object Raising
Rule (9)	Subject Raising
Rule (10)	Equi-NP Deletion
Rule (11)	Extraposition
Rule (12)	Pro Deletion
Rule (13)	Object Anaphora
Rule (14)	Object Focussing
Rule (15)	Object Copying
Rule (16)	Noun prefix (segment) rule
Rule (17)	Subject Postposing

A detailed account of these transformations would be such an enormous undertaking that it would run to a volume by itself. Such a treatment falls outside the purview of the present study; for the purpose in hand, a sketch of each of these transformations will suffice. This study has been carried out within the framework of a cyclic grammar. The concept of a cyclic grammar is discussed in subsection 5.18 in this chapter.

5.1 Passive (cyclic)

Like many other languages Shona has among its various types of sentence passive as well as active sentences. That these two types of sentence are somehow related is well known. Almost every Shona grammar

that has been produced to date describes the passive construction in one way or another. What is unclear however is precisely what the nature of the relation between passive sentences and their corresponding active sentences is. To this end consider the following sentences:

(1)a. Mapfemi ákauráya mbáda.

(Baboons killed a leopard.)

b. Mbada yákauráyiwa nemápfeni.

(A leopard was killed by baboons.)

(2)a. Kuti ákwiré bhásikoro zvákánétsa Zúze.

(that - he ride - a bicycle - troubled - Zuze =

It was a bother for Zuze to ride a bicycle.)

b. Zúze ákánétswa nekúti ákwiré bhásikoro.

(Zuze - was bothered - by that - he ride - a bicycle =

It was a bother for Zuze to ride a bicycle.)

As can be observed in these sentences, roughly what the passive transformation does is first to interchange the subject noun phrase with the object noun phrase, secondly to introduce the passive element /w/ into the verb, and thirdly to introduce the agent formative /NA/.

The passive transformation will operate on a structure of the type given below:

NP_1 - AUX - V - NP_2 .

The following conditions however must also be satisfied. First, NP_1 and NP_2 must not be referentially identical. In (3a) below the object NP $Tsitsi_1$ is formally and referentially identical with the subject NP $Tsitsi_1$, hence (3b) is ill-formed.¹

(3)a. * $Tsitsi_1'$ ákaróva $Tsitsi_1'$.

(* $Tsitsi_1$ beat $Tsitsi_1$.)

b. * $Tsitsi_1'$ ákaróhwa na $Tsitsi_1'$.

1. For more discussion on referential identity see P.M. Postal in Cross-over Phenomena, Chapters 1 and 2.

(*Tsitsi₁ was beaten by Tsitsi₁.)

Nevertheless it is possible for NP₁ and NP₂ to be identical in form while not being co-referential. In such a case the passive rule can apply readily as is illustrated in (4b) below.

(4)a. Tsitsi₁' ákaróvá Tsitsi₂'.

(Tsitsi₁ beat Tsitsi₂ i.e. the two are different persons)

b. Tsitsi₁' ákaróhwa' naTsitsi₂'.

(Tsitsi₁ was beaten by Tsitsi₂.)

Secondly, the verb phrase in the structural description of this rule must be of the type that allows the passive to operate. There are certain verb phrases in Shona which, though they contain noun phrases as complements, do not permit this rule to operate.² Examples of such verb phrases can be seen in the following sentences:

(5)a. Mwana' uyu ánenge réma'.

(This child seems to be a fool.)

b. Tsága iri rínorema zana rémapáunzi.

(This bag weighs 100pounds.)

If the sentences in (5) are put into the passive the results are the sentences in (6).

(6)a. *Réma rínengewe némwana' uyu.

b. *Zana rémapáunzi rínoremwa nétsaga iri.

Since there are very few such verbs in Shona, they can be marked in the lexicon as not permitting the passive rule to operate. Those which allow this rule to operate will then appear unmarked.³

There is yet another type of verb phrase which will not permit

2. cp behaviour of middle verbs in English.

3. See G.Lakoff in Irregularity in Syntax for rule specification in the lexicon.

the passive to apply even though it appears to consist of a verb and a noun phrase. Such is the verb phrase in which the object noun phrase constitutes an inalienable part of the nearest noun phrase on its left as is shown by the sentences in (7) - (10).

(7) Ngoro' yábvá v'íri.

(a wagon - came off - a wheel = The wagon lost a wheel.)

(8) Mombe yákyóká' gúmbo.

(a cow - broke - a leg = The cow had its leg broken.)

(9) Muvhími ákapfúrá' nzóu dúndundu'.

(a hunter - shot - an elephant - a chest =

The hunter shot an elephant in the chest.)

(10) Fani' ákachéka' Sara' nzara'.

(Fani - cut - Sara - finger-nails =

Fani cut Sara's finger-nails.)

The verb phrases in both (7) and (8) each consist of a verb and a noun phrase, while in both (9) and (10) they each consist of a verb and two object noun phrases. V'íri in (7) and gúmbo in (8) constitute inalienable parts of the subject noun phrases ngoro' and mombe respectively. In this case the passive rule will not apply.

(11) *V'íri rábviwa néngoro'.

(12) *Gumbo rátyokwa nemómbe.

The sentences in (9) and (10) can be turned into the passive by interchanging the first object noun phrase with the subject noun phrase. This will result in the following sentences which are well-formed:

(13) Nzou yákapfúrwá dúndundu' némuvhími'.

(An elephant was shot in the chest by the hunter.)

(14) Sara' ákachékwá' nzara' naFani'.

(Sara's finger-nails were cut by Fani.)

On the other hand, because the second object noun phrase in (9) and (10) forms an inalienable part of the first object noun phrase, these two sentences cannot be passivized by interchanging the second object noun

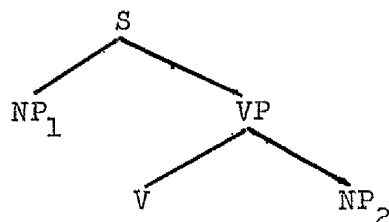
phrase with the subject noun phrase as is shown by the ungrammaticality of the sentences below.

(15) *Dúndundú rákapfúrwá nzóu némuvhími.

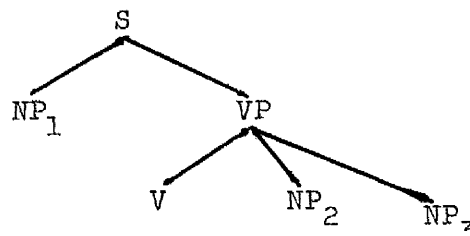
(16) *Nzará dzákachékwá Sará naFani.

In (7) ^{and} (10) it is assumed that their rough deep structures are respectively (a) and (b) below:

(a)



(b)



However this assumption seems to be counter-intuitive, especially when we see that in (7), for instance, it was only the vhiri which came off and not the whole ngoró as such. Accordingly the logical subject of the verb -bva here is vhiri and not ngoró. In (10) what was cut were the finger-nails only and not the whole of Sará as such. The logical object noun phrase of the verb -chéká is in this sentence nzará and not Sará.

If the logical subject noun phrases in (7) and (8) are made the grammatical subjects also, and if the logical object noun phrases in (9) and (10) are also made the grammatical objects, the following sentences which are grammatical will result:

(17) Vhíri réngoró rábva.

(The wagon's wheel came off.)

(18) Gumbo remómbe rákatyóká.

(The cow's leg got broken.)

(19) Muvhími ákapfúrá dúndundú renzóu.

(The hunter shot an elephant's chest.)

(20) Fani ákachéká nzará dzaSará.

(Fani cut Sara's finger-nails.)

Note that the subject noun phrases in (7) and (8) and the first object

noun phrases in (9) and (10) have become possessives in the process. It is possible to regard the phrase-markers of the sentences in (17) - (20) as the structures which underlie the sentences in (7) - (10) respectively. This appears to be a logical and natural thing to do. Nonetheless there is a problem in adopting this approach. The sentences in (7) - (10) can be derived from the corresponding structures which underlie those in (17) - (20) only when the head nouns of the subject noun phrases in (17) and (18) and the head nouns of the object noun phrases in (19) and (20) exhibit an inalienable relationship with the accompanying possessor in that subject or object noun phrase. If this relationship does not obtain, this transformation will block as illustrated in the sentences which follow.

(21)a. Pénzura yémwana' yátyoka.

(The child's pencil got broken.)

b. *Mwana' átyoka pénzura.

(*The child got broken a pencil.)

(22)a. Madomási ásekuru ákátsvuka.

(Uncle's tomatoes have become red.)

b. *Sekuru ákátsvuka madomási.

(*Uncle became red tomatoes.)

In the noun phrases pénzura yémwana' and madomási ásekuru the head nouns pénzura and madomási do not constitute an inalienable part of mwana' and sekuru respectively, hence the ungrammaticality of (21b) and (22b).

If this analysis is correct, as I believe it is, the feature $\left[\begin{smallmatrix} + \\ \text{inalienable} \end{smallmatrix} \right]$ must then be built in somehow in the subcategorization statement of such verbs as -tyóká and -tsvuka. Since this presentation follows the generative transformational model and the standard theory in this model as currently formulated does not seem to permit this extension this presents a difficulty. Owing to the complexities involved here I leave it as an open question as to which is the more viable of

the two suggested analyses. In this study I have adopted the former analysis although it appears to be counter-intuitive.

Now note that in each of the sentences in (23) and (24) below there are also two object noun phrases just as in each of the sentences in (9) and (10). These object noun phrases do not however exhibit the part-and-whole relationship that was seen in respect of the object noun phrases in (9) and (10).

(23) Ambúya vápa muzukúru mabházi.

(The grandmother gave her grandchild some buns.)

(24) Rowsái akákánda Chipó bhóra.

(Rowesai - threw - Chipo - a ball =

Rowesai threw a ball to Chipo.)

Each of the sentences in (23) and (24) can be passivized by interchanging either of the two object noun phrases with the subject noun phrase. The resultant strings will be perfectly acceptable Shona sentences.

(25)a. Muzukúru ápihwa mabházi naambuía.

(The grandchild was given some buns by its grandmother.)

b. Mabházi ápihwa muzukúru naambuía.

(Some buns were given to the grandchild by its grandmother.)

(26)a. Chipó akákándwa bhóra naRowsái.

(Chipo had a ball thrown to her by Rowsai.)

b. Bhóra rákákándwa Chipó naRowsái.

(A ball was thrown to Chipo by Rowsai.)

Notice that it is possible for the two noun phrases to be distinct in form but to be fully or partially co-referential. In such cases the passive will not apply. To this end consider the sentences which follow:

(27)a. Posáni akabáta bhóra.

(Posani caught the ball.)

b. Bhóra rákabátwa naPosáni.

(The ball was caught by Posani.)

(28)a. *Shumba yakauraya mhondoro
 (*A lion killed a lion.)

b. *Mhondoro yakauráyiwa neshumba.
 (*A lion was killed by a lion.)

(29)a. Sará anoróva vaná vake.
 (Sara beats up her children.)

b. *Vana vake vanoróhwa naSara.
 (*Her children (i.e. Sara's) are beaten up by Sara.)

The two noun phrases which are to interchange in (27a) are different both in form and in reference, hence the passive is permitted as (27b) shows. In (28a) the two noun phrases to interchange, though distinct in form, are nonetheless co-referential, hence (28b) is ill-formed. Note that whenever the subject and the object in a sentence are referentially identical the latter is obligatorily reflexivized. This accounts for the ungrammaticality of (28a). Now in (29a), even though the subject noun phrase and the object noun phrase are distinct from each other in form, there is however an element in the object noun phrase which refers to the subject noun phrase Sará. This element is -ke in vake (her). For this reason the two noun phrases in (29a) cannot be said to be strictly non-co-referential, hence the passive will not operate as is shown in (29b). If, however, vake in (29a) does not refer back to Sará, the sentence will passivize since the two noun phrases in question will then be strictly non-co-referential.

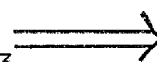
Having discussed the structure which underlies the passive construction we can now proceed to formalize it.

Rule (1) Passive

X - passive - NP₁ - AUX - V - (NP₂) - NP₃ - Y

1 2 3 4 5 6 7 8

1 ∅ 7 4 5+w 6 ∅ 8 NA + 3



This formulation of the passive requires comment. Its structural descrip-

tion has been formulated with two object noun phrases. Notice that NP₂ is bracketed. This is meant to accommodate the derivation of (27b) and (30b - c). In deriving (27b) and (30b) term 6 will be null, while in order to get (30c) term 6 will be the noun phrase nyóká.

(30)a. Vana' váuraya nyóká' kudangá'.

(The children killed a snake at the cattle-pen.)

b. Nyóká' yáurayiwa kudangá' névana'.

(A snake was killed at the cattle-pen by the children.)

c. Kudangá' kwáurayiwa nyóká' névana'.⁴

(At the cattle-pen was killed a snake by the children.)

In sentences like those in (31a) and (32a) in which an adverbial occurs between the verb and its object noun phrase the adverbial is considered to be outside the verb phrase at the time when the passive rule applies.

(31)a. VaMaténzéní' vakábíka kúchirí' kúchena sadza révaná' vémukúwasha.

(Matenzeni prepared before it was dark the sadza for the children of her son-in-law.)

b. Sadza révaná' vémukúwasha rákábíkwa kúchirí' kúchena naVaMaténzéní'.

(The sadza for the children of her son-in-law was prepared before it was dark by Matenzeni.)

(32)a. Mombe idzi dzíchadya' chéte nhási mumunda uyu.

(These cattle will surely lay waste today this field.)

b. Mumunda uyu múchadyíwá chéte nhási nemómbe idzi.

(This field will surely be laid waste today by these cattle.)

Nevertheless, the passive rule as it has been formulated does not solve all the problems related to it. The rule would be more adequate if it could be so formulated that given the structures which underlie the sentences in (9) and (10) and those in (23) and (24) it would

4. This sentence could also mean "At the cattle-pen were killed a snake and some children." In this discussion however this second reading is inconsequential.

be predicted that two passives are possible with the latter as shown in (25) and (26), but that only one passive sentence is permitted with the former as shown in (13) and (14) respectively. As it is there does not seem to be a way of blocking the rule from producing the ill-formed sentences in (11) and (12).⁵ In the absence of a satisfactory way of specifying the correct deep structures which underlie sentences like those in (7) - (10) the passive rule as formulated on p. 183 will suffice.

5.2 Pseudo-passive (cyclic)

The application of the pseudo-passive rule is much the same as that of the passive in 5.1. It will operate on a structure of the

5. It may be argued that by assuming that, for instance, Sará nzará in (10) has the structure
$$\begin{array}{ccccc} \diagup & \diagdown & \diagup & \diagdown & \diagup \\ \text{NP} & \text{NP} & \text{NP} & \text{NP} & \text{NP} \end{array}$$
 and allowing the A-over-A principle to apply, the ill-formed sentences in (15) and (16) are accounted for. (For the A-over-A principle see Chomsky: 1964a; Ross: 1967a) This solution however is unsatisfactory for three reasons: (a) according to this structure none of the noun phrases Sará and nzará is exhaustively dominating the other, a condition necessary for the A-over-A principle, so that strictly speaking this principle cannot be said to apply here; (b) this structure does little, if anything at all, to capture the inalienable relationship which exists between Sará and nzará; and (c) given this compound noun phrase
$$\begin{array}{ccccc} \diagup & \diagdown & \diagup & \diagdown & \diagup \\ \text{NP} & \text{NP} & \text{NP} & \text{NP} & \text{NP} \end{array}$$
 there will be a difficulty with the passive rule. Applying the passive then to the structure underlying (10) will yield the ungrammatical sentence

$$\begin{array}{ccccc} \diagup & \diagdown & \diagup & \diagdown & \diagup \\ \text{NP} & \text{NP} & \text{NP} & \text{NP} & \text{NP} \end{array} \quad \text{'achekwa naFani.}$$

(*Sara finger-nails was cut by Fani.)

This same sequence of words would be a grammatical sentence if Sará and nzará are taken to be independent noun phrases, with Sará as subject NP, and nzará as object NP which has been front-shifted in this sentence.

following type:

$NP_1 - AUX - V - NP_2$.

Like the passive it will interchange the subject NP with the object NP; it will introduce the pseudo-passive formative /ik/ into the verb; and it will also introduce the agent formative /NA/.

However, the pseudo-passive, which is triggered off by an element in deep structure, differs significantly in meaning from the ordinary passive. The meaning of the pseudo-passive is roughly that the deep structure object has the potentiality to undergo the action or state expressed by the simple verb. Note that the pseudo-passive process is very productive. The (b) sentences in the examples which follow have undergone the pseudo-passive transformation.

(33)a. Vanhu vánodyá sádza.

(People eat sadza.)

b. Sadza rínodyíká nevánu.

(Sadza is edible as far as people are concerned.)

(34)a. Basa rábaya varúme'ava.

(Work has worn out these men.)

b. Varúme'ava vábáyika nebása.

(These men have become worn out with work.)

The type of verb phrases which allow this rule to operate is the same as that which allows the simple passive to apply.

The pseudo-passive rule may be represented in formal terms as follows:

Rule (2) Pseudo-passive

$X - \text{pseudo-pass.} - NP_1 - AUX - V - (NP_2) - NP_3 - Y$

1 2 3 4 5 6 7 8

1 \emptyset 7 4 5+ik 6 \emptyset 8 NA + 3 \Rightarrow

condition: 3 and 7 must not be referentially identical.

Another difference with the simple passive rule is that, more often than

not, after the pseudo-passive has operated, Agent Deletion applies. (For the rule of Agent Deletion see subsection 5.3 below.) In the sentences which follow, though both the (b) and (c) sentences may be grammatical, the (c) sentences are more acceptable than the (b) sentences.⁶

(35)a. Matí'cha á'nonyó'rá pabhódhi.

(Teachers write on the blackboard.)

b. ?Pabhódhi pánonyó'reká nématí'cha.

(on the board - it can be written - by teachers =
Blackboards can be written on by teachers.)

c. Pabhódhi pánonyó'reká.

(on the board - it can be written on =
Blackboards can be written on.)

(36)a. VáCharwé vánonyimá VáSaru doro.

(Charwe refuses to give Saru some beer.)

b. ?VáSaru vánonyimiká doro naVáCharwé.

(Saru can be refused some beer by Charwe.)

c. VáSaru vánonyimiká doro.

(Saru can be refused some beer.)

(37)a. Vanhu vánzwa zvamátaúra.

(The people have understood what you said.)

b. ?Zvamátaúra zvánzwika nevá'hu.

(What you said has been understood by the people.)

c. Zvamátaúra zvánzwika.

(What you said has been understood.)

The passive rule and the pseudo-passive rule are normally mutually exclusive in any simple sentence.⁷

6. The notation (?) signifies that the sentence is ^{only} marginally acceptable to some Shona speakers, ~~but is rejected altogether by others.~~

7. I say "normally" because with a few verbs both the pseudo-passive

5.3 Agent Deletion (cyclic)

The rule of Agent Deletion is meant to account for the absence of the agent in sentences like the following:

(38) Imbá yédu yakapíswá makéi.

(Our house was burnt last year.)

(39) Pahwahwá hapábvike.

(at beer - not get away from = It is difficult to get away from a place where there is beer.)

It is quite clear that in (38) the grammatical subject is not the same as the logical subject. Somebody or something must have been the gram-

and the simple passive formatives may^{be} found occurring together in that order, e.g.

-ón-ék-w-a (be seen)	cp -óná (see)
-nzw-ik-w-a (be heard)	cp -nzwá (hear, understand)
-wan-ik-w-a (be found)	cp -wana (find)

Worse still, in some cases, the pseudo-passive, the reciprocal and the simple passive formatives may occur together, e.g.

-ziv-ik-an-w-a (be known)	cp -ziva (know)
-d-ik-an-w-a (be loved, wanted)	cp -da (love, want)

No doubt these verbs present some difficulty. Normally the presence of the formative /ik/ (or /w/) in a sentence signifies that the pseudo-passive (or simple passive) has applied. Taking the verb -wana as an example, we see that it is usually followed by an object noun phrase.

Jéke anowana makuponi.

(Jack gets (petrol) coupons.)

The underlying structure of this sentence meets the structural description for either the pseudo-passive only as in:

Makuponi anowanika naJéke.

((Petrol) coupons can be obtained by Jack.)

or the simple passive as in:

Makuponi anowaniwa naJéke.

((Petrol) coupons are obtained by Jack.)

After the pseudo-passive has applied the structural description for the simple passive is no longer met, and vice versa. It would appear then that the occurrence of the formatives /ik/ and /w/ in anowanikwa is not a result of the successive application of the pseudo-passive and the simple passive transformations. It follows, therefore, that, as transformational processes, the pseudo-passive and the simple passive are mutually exclusive in any simple sentence.

matical agent responsible for burning the house. But then this somebody or something is not overtly expressed in the sentence. The same applies to the sentence in (39). It has got to be some person who can perform the action of moving away from a beer party. In each of these two sentences the agent has been left out. The rule which deletes the agent in this way may be represented as shown below.

Rule (3) Agent Deletion

X - na + NP - Y

1 2 3

1 \emptyset 3



It must be emphasized though that the phrase na + NP ought to be one which has resulted from a previous application of either the simple passive or the pseudo-passive transformation. Notice that in Shona na + NP can signify other ideas also that have nothing to do with agency at all. For instance,

(a) na + NP may indicate instrumentality as in (40);

(40)a. Baba' váuraya mombe nédemo.

(Father killed a cow with an axe.)

b. Mombe yáurayiwa nédemo nababa'.

(A cow was killed with an axe by father.)

c. Mombe yáurayiwa nédemo.

(A cow was killed with an axe.)

Agent deletion cannot apply to (40a) to delete the phrase nédemo. It only applies to (40b) and the result is (40c). Note however that strictly speaking agent deletion only applies to unspecified agents (e.g. munhu (a person), chinhu (a thing), zvinhu (things)), not baba', because of the condition on the recoverability of deleted material.⁸

8. For some discussion on the recoverability of deleted elements see J.J.Katz and P.M.Postal in An Integrated Theory of Linguistic Description

(b) Co-ordination is another idea which is expressed by na + NP.

(41)a. Tafa' naPeni' vákarová tícha goré rakápera.

(Tafa and Peni beat up a teacher last year.)

b. Tícha ákaróhwa goré rakápera naTafa' naPeni'.

(A teacher was beaten up last year by Tafa and Peni.)

c. Tícha ákaróhwa goré rakápera.

(A teacher was beaten up last year.)

Because Tafa' naPeni' constitutes a conjoined structure Agent Deletion cannot apply to it to delete naPeni' without destroying the conjoined structure. This rule can, however, apply to (41b) to delete naTafa' naPeni' and resulting sentence is (41c).

Agent deletion is ordered after both the simple passive and the pseudo-passive rules.

5.4 Reflexive (cyclic)

In Shona, just as in many other languages, whenever the object noun phrase is identical with the subject noun phrase and the two are in the same simple sentence, the former constituent is obligatorily reflexivized as the sentences below illustrate.

(42)a. *̄Mombe íye₁ yákuvadza ̄mombe íye₁.

(*̄That cow₁ hurt ̄that cow₁.)

b. Mombe íye yázvikuvadza'.

(That cow hurt itself.)

(43)a. *̄Mwana₁ ácharúma ̄mwana₁ ̄rurími₂.

(*̄The child₁ will bite ̄the child₁ ̄the tongue₂.)

b. Mwana' áchazviruma' rurími'.

(The child will bite itself on the tongue.)

(1964) p.43ff and p.80ff; Chomsky in Aspects of the Theory of Syntax p.144ff; N.Ruwet in An Introduction to Generative Grammar (1973) (in translation) p.218 - 219.

This rule may be represented formally as follows:

Rule (4) Reflexive

$$\begin{array}{cccccc}
 X & - & NP_1 & - & AUX & - & V & - & NP_2 & - & Y \\
 1 & & 2 & & 3 & & 4 & & 5 & & 6 \\
 1 & & 2 & & 3 \left[\begin{array}{c} 5 \\ +\text{reflex.} \end{array} \right] & +4 & \emptyset & & 6 & \Longrightarrow
 \end{array}$$

Now $\left[\begin{array}{c} NP \\ +\text{reflex.} \end{array} \right]$ will always be spelt out as zvi (or dzi in some forms of the Manyika dialect) irrespective of the class to which the head noun of the noun phrase belongs.

The word "identity" requires comment. Just as during the discussion of the passive rule partial co-referentiality between the subject NP and the object NP was enough to block the sentence from passivizing, so also will partial co-referentiality block reflexivization. For an object NP to be reflexivized it must be strictly referentially identical with the subject NP in that sentence. To this end consider again (16a) which is repeated here for convenience as (44).

(44) *Sará' ánoróvá vana' váké.*

If the possessive pronoun -ke in this sentence refers to Sará', then the structure which underlies this sentence is roughly that in (45).

(45) *Sará' ánoróvá* $\left[\begin{array}{c} \text{vana'} \\ NP \end{array} \right]$ $\left[\begin{array}{c} \text{Sará' áne vana'} \\ S \end{array} \right]$ $\left[\begin{array}{c} \text{Sará' áne vana'} \\ S \end{array} \right]$ $\left[\begin{array}{c} \text{vana'} \\ NP \end{array} \right]$.

(Sara beats up $\left[\begin{array}{c} \text{children} \\ NP \end{array} \right]$ $\left[\begin{array}{c} \text{Sara has children} \\ S \end{array} \right]$ $\left[\begin{array}{c} \text{Sara has children} \\ S \end{array} \right]$ $\left[\begin{array}{c} \text{children} \\ NP \end{array} \right]$.)

The possessive construction here is assumed to derive from an embedded sentence. It is clear that the object NP in (45), namely, $\left[\begin{array}{c} \text{vana'} \\ NP \end{array} \right]$ $\left[\begin{array}{c} \text{Sará' áne vana'} \\ S \end{array} \right]$ is not altogether referentially identical with the subject NP, namely, Sará'. In this case reflexivization blocks as shown in (46).

(46) **Sará' ánozvírova'.*

The sentence in (46) cannot be said to be the reflexive sentence of (44).

This does not however imply that (46) is ungrammatical per se. It can be grammatical but only if it is deemed to derive from (47).

(47) Sara₁' ánoróvá Sara₁'.

(Sara₁ beats Sara₁.)

This sentence, that is (47), meets the structural description for the reflexive rule, but not the sentence in (45).

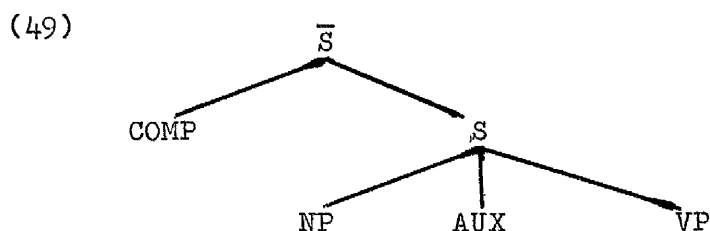
5.5 Mood Incorporation

Complementizers have been taken to consist each of two elements, namely, a complementizer formative and a mood, e.g.

(48)a. kuti /+ indicative/

b. kana /+ participial/

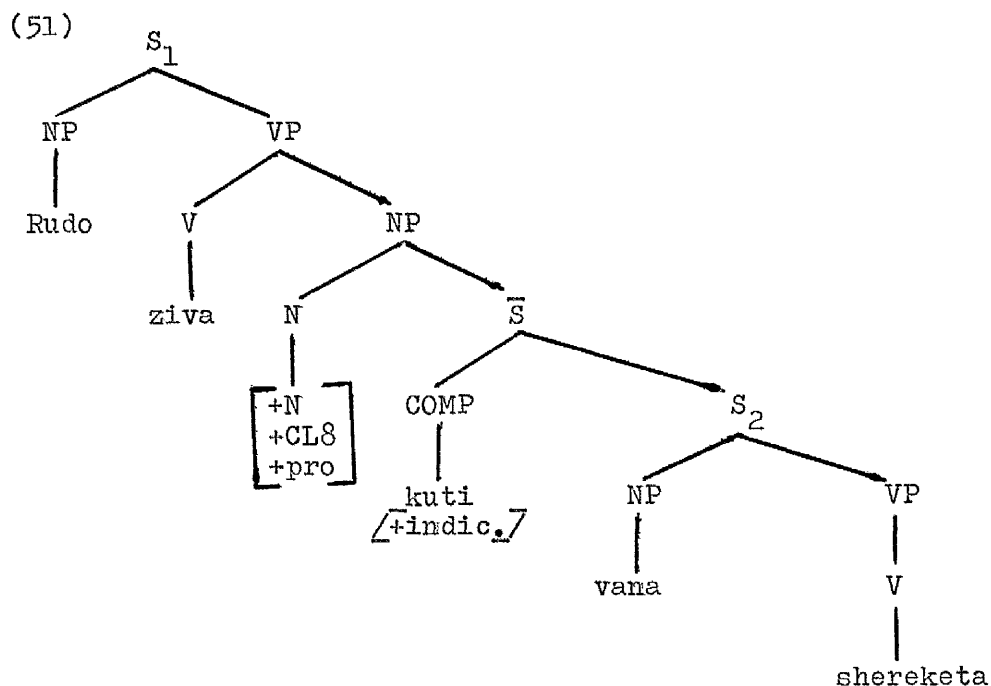
(For the full list of complementizers see subsection 2.10.) These complementizers serve to introduce embedded sentences as has already been stated above. The embedded sentence which is introduced by complementizers has the following tree structure:



The symbol \bar{S} signifies that this is an embedded sentence, while the symbol S signifies a sentence similar in all relevant respects to the S which is taken as the initial symbol of the grammar. The rough diagrammatic representation of the deep structure of the sentence in (50), which contains an embedded sentence, is found in (51).

(50) Rudó ánozívá kúti vaná vánoshereketa.

(Rudo knows that children are mischievous.)



In any sentence in Shona the nucleus of the predicate, by which is meant in this case the subject concord, the tense and the verb proper as forming one word, must appear in one or another of the moods that exist in the language. Assuming that the diagram in (51) is correct, we notice that mood is dominated by the node COMP which lies outside S_2 . In the surface structure of this sentence it is not the complementizer formative kuti, but rather the nucleus of the predicate of S_2 , which carries the indicative mood. Nevertheless, it is kuti which determines that the predicate of S_2 should be in the indicative mood. If another complementizer formative is substituted for kuti, e.g. kana, the predicate of S_2 will be in the participial or consecutive mood, but certainly not in the indicative mood.

In order to characterize what happens in the derivation of such sentences as the one in (50), it is proposed to set up a rule which will move the feature mood from under the domination of COMP and place it somewhere in the auxiliary, maybe as a sister node of Tense. (Tense is suggested here because, given a mood, there will be variations of tone patterns within that mood which are occasioned by Tense.) Let

us label this rule the Mood Incorporation rule. It may be formalized as follows:

Rule (5) Mood Incorporation

$$X \underset{\bar{S}}{=} \underset{\text{formative}}{\bar{\text{complementizer}}} - \bar{\text{mood}} - \underset{\bar{S}}{\bar{\text{NP}}} - \text{AUX} - \underset{\bar{S}}{\bar{Y}} \underset{\bar{S}}{\bar{Z}}$$

1 2 3 4 5 6

1 2 \emptyset 4 3+5 6 \Rightarrow

This rule is meant to capture the idea that the embedded sentence will be in a mood the choice of which is determined by the complementizer.

5.6 Complementizer Placement (cyclic)

After the Mood Incorporation rule has applied there is need for another rule which will take the complementizer formatives from their position before the subject NP to a position immediately after this subject NP. That such a rule is desirable is evident from an examination of the following pairs of sentences.

(52)a. Pita ánofunga kuti Kóndó ánodzoka mangwána.

b. Pita ánofunga Kóndó kuti ánodzoka mangwána.

(Peter thinks that Kondo will return tomorrow.)

(53)a. Fani ákafembérá kuti sekúru vánosvika nhási.

b. Fani ákafembérá sekúru kuti vánosvika nhási.

(Fani calculated that uncle would arrive today.)

(54)a. Rwodzi ákanganwa kana Motsi ákátaúra mazwi íwayo.

b. Rwodzi ákanganwa Motsi kana ákátaúra mazwi íwayo.

(Rwodzi has forgotten whether Motsi said those words.)

(55)a. Kana Roda ákapasa zvingashámise.

b. Roda kana ákapasa zvingashámise.

(If Roda passes it will be surprising.)

(56)a. *Zva mvúra yápera mutsime zvichámetsa.

(since - water - it has finished - in well - it will be hard)

b. Mvurá zvayápera mutsime zvičhanétsa.

(water - since it is finished - in well - it will be hard
= Since there is now no water in the well there will be
a problem.)

(57)a. *Ku Matinyadza chaiye ánosvika páno' zvinoshura.

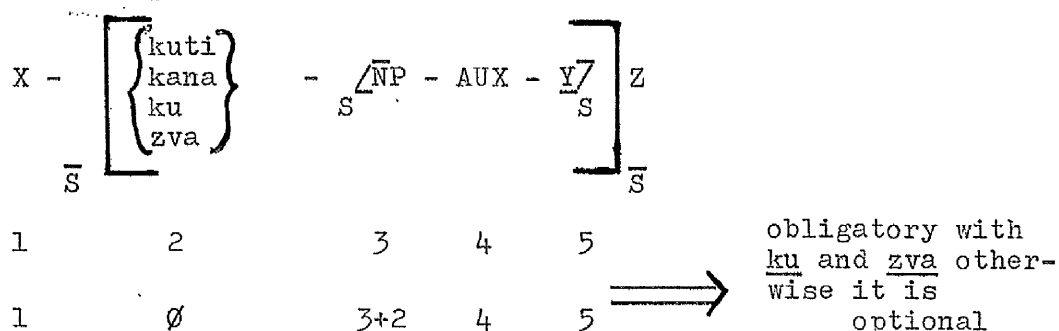
(for to - Matinyadza - she arrives - here - is an ill-omen)

b. Matinyadza chaiye kusvika páno' zvinoshura.

(For Matinyadza to come here is an ill-omen (for us).)

Both sentences in each of the pairs in (52) - (55) are well-formed, but only the (b) sentences in (56) and (57) are grammatical. The sentences in each pair have the same semantic content. Note that in the (a) sentences the complementizer formatives lie outside the embedded sentence, while in the (b) sentences they occupy a position immediately after the subject NP. This is the only structural difference between the sentences in each pair. It can be seen from these sentences that while the placing of the complementizer formatives after the subject NP of the embedded sentence is optional in (52) - (55), it is obligatory in (56) and (57). I shall refer to this process as complementizer placement.

Rule (6) Complementizer Placement



Note that this rule is considered to apply only after Mood Incorporation has applied.

It might be suggested that the (b) sentences in (52) - (55) show instances of object raising (discussed in 5.7 below) rather than complementizer placement. That such a suggestion is fallacious is easily

demonstrable. Let us consider (52b) as an example. If Kóndó occurs before the complementizer formative kuti by virtue of the rule of object raising, then it follows that it is now a direct object NP of the verb -funga for this is what the rule of object raising does. That being so, the object anaphora and the passive rules, for instance, should be able to apply, but they do not, as the ungrammaticality of (58a) and (58b) indicate respectively.

(58)a. *Píta ánomúfunga kuti ánodzoka mangwána.

b. *Kóndó ánofungwa naPíta kuti ánodzoka mangwána.

These same transformational rules will yield negative results in respect of the (b) sentences in (53) and (54) as shown in (59) and (60) respectively.

(59)a. *Fani' ákaváfémberá kuti vānosvika nhási.

b. *Sekúru vākafémberwá naFani' kuti vānosvika nhási.

(60)a. *Rwodzi' ámukanganwá kana ákátaúra mazwi' iwayo.

b. *Motsi' ákanganwiwa naRwodzi' kana ákátaúra mazwi' iwayo.

In (55b) object raising could not have applied by virtue of the position occupied by the complement clause in this sentence. Since this is an embedded sentence functioning as a subject it might be suggested that subject raising (see 5.8) has occurred instead. This suggestion too is easily discounted because if subject raising has occurred in (55b), then Roda is now the grammatical subject of the containing sentence and consequently it should now control the concordial agreement in this higher sentence, but it does not. The concord zvi in zvingashámisé is neither dictated nor controlled by the class prefix of Roda. If Roda controlled the concord in the higher sentence we would have the following sentence which however is also grammatical.

(61) Rodá kana akapasa ángashámisé.

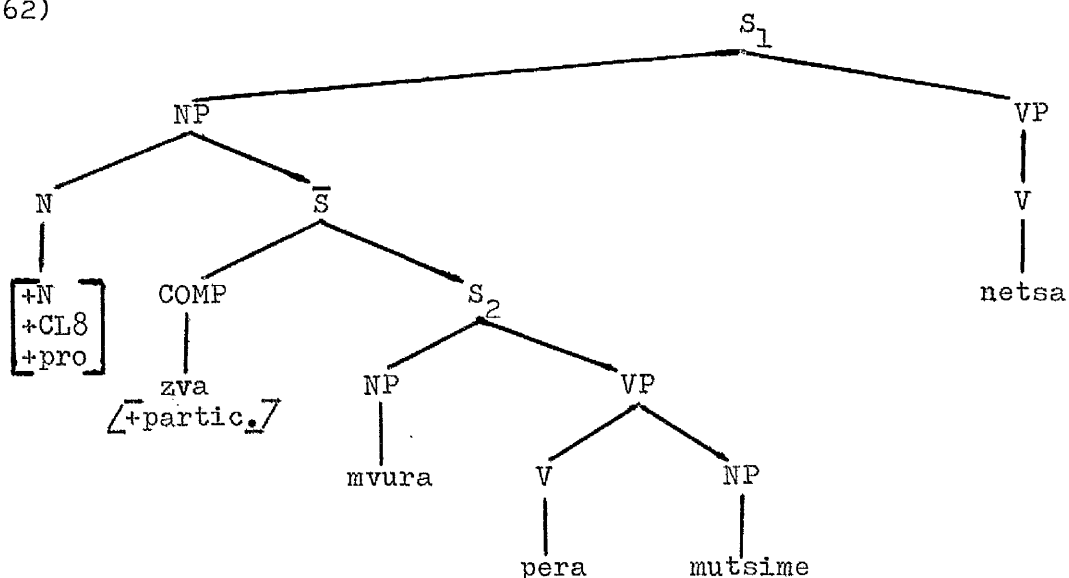
(If Roda passes she could surprise (us).)

It is quite clear therefore that Roda occurs before kana in (55b), not

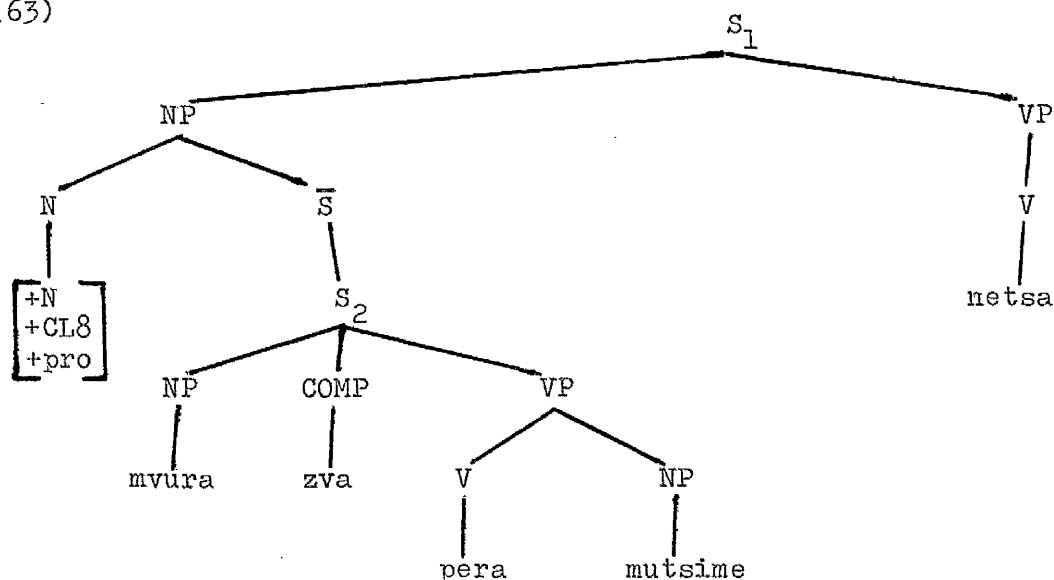
through the rule of subject raising, but by some other process. It is claimed here that this change in word order is occasioned by the process which I have called complementizer placement.

Here is a further illustration of the operation of this rule. The deep structure representation of the sentence in (56) would be something like the tree in (62).

(62)



(63)



After applying Mood Incorporation and then Complementizer Placement to the structure in (62) the result is the tree in (63). The complementizer

formative zva now occurs after the noun phrase mvúrá. Further examples showing how the rule of complementizer placement operates can be seen in the sentences in (62) - (65) in Chapter Four.

5.7 Gender Copying (cyclic)

Each of the following strings of words is a noun phrase.

- (64)a. chipúnu chóse (the whole spoon)
 b. zvipúnu zvóse (all the spoons)
 c. tupadza twóse (all the little hoes)
 d. kamba kóse (the whole little house)

In each noun phrase there is concordial agreement between the head noun and the quantifier -óse (all, whole). The concords are underlined in these noun phrases. If the concords on the quantifier are mixed up the resulting strings will be ungrammatical noun phrases as is shown in (65).

- (65)a. *chipúnu zvóse
 b. *chipúnu twóse
 c. *zvipúnu twóse
 d. *kamba chóse

When making up lexical entries for the quantifiers, and any other noun qualifiers for that matter, it is not necessary, and indeed it would be grossly uneconomical, to list the quantifier together with the quantifier concords as in (66).

- (66)a. chóse (all, whole)
 b. twóse (all, whole)

The quantifier concords are predictable once we know the gender or class to which the head noun belongs. Thus, if we are given a head noun with $\angle^+ \text{CL}_i _ \rceil$ as one of its cluster of features we can predict without any difficulty that the quantifier is also going to have obligatorily the feature $\angle^+ \text{CL}_i _ \rceil$. When the noun chipúnu appears in the lexicon it will include among its features the following:

- (67)
- | |
|--------|
| -punu |
| +N |
| +CL7 |
| +count |
| : |
| : |
| : |
| spoon |

while the quantifier chóse will appear something like this:

- (68)
- | |
|-------------|
| -ose |
| +Quantifier |
| : |
| : |
| : |
| all, whole |

The noun phrase chipunu chóse would then be derived by invoking an agreement transformational rule which copies the gender or class feature of the head noun on to the quantifier. Later rules, including the noun prefix segment rule which will be discussed briefly in 5.16, will then apply to give us the noun phrase chipunu chóse.

Concordial agreement is not only found within a noun phrase, but also between the subject noun phrase and the predicate.

- (69)a. Chingwa chinonaka.
 (Bread tastes nice.)
 b. Kamba aka kanotonhora.
 (This little house is cold.)
 c. Varume vanonwa hwahwa'.
 (Men drink beer.)

As before, if the concords are interchanged the results will be ungrammatical sentences as in (70).

- (70)a. *Chingwa kanonaka.
 b. *Chingwa vanonaka.
 c. *Varume chinonwa hwahwa'.

It is observed here that the feature $\left[\begin{smallmatrix} + \\ CL_1 \end{smallmatrix} \right]$ of the head noun of the subject noun phrase is copied on to the predicate in order to effect

concordial agreement.

The formulation of the agreement rule, or gender copying as it will be referred to in this study, in Bantu languages is a subject of debate in current linguistic studies.⁹ One solution is to set up two separate rules, one to cope with agreement within a noun phrase, and the other to account for agreement between the subject noun phrase and the predicate. Such rules would be roughly as follows:

(71)a. agreement within a noun phrase

$$\begin{array}{ccccccc}
 X & - & \left[\begin{array}{c} +N \\ +CL_i \\ \vdots \end{array} \right] & - & \left\{ \begin{array}{l} \text{Adj.} \\ \text{Demonstr.} \\ \text{Selector} \\ \text{Quantit.} \\ \text{Possessive} \end{array} \right\} & - & Y \\
 1 & & 2 & & 3 & & 4 \\
 & & & & & & \Rightarrow 1, 2, \left[\begin{array}{c} 3 \\ +CL_i \end{array} \right], 4
 \end{array}$$

b. agreement between the subject NP and the predicate

$$\begin{array}{ccccccc}
 X & & \left[\begin{array}{c} +N \\ +CL_i \\ \vdots \end{array} \right] & - & Y & - & \text{AUX} - Z \\
 & & \text{NP} & & \text{NP} & & \\
 1 & & 2 & & 3 & & 4 \\
 & & & & & & \Rightarrow 1, 2, \left[\begin{array}{c} 3 \\ +CL_i \end{array} \right], 4
 \end{array}$$

However desirable these two rules may seem to be, they make a misleading claim, namely, that the $\left[+CL_i \right]$ feature is copied on to the qualifier as one operation and on to the predicate as another, independent operation. Our grammar would be more adequate if this feature-copying opera-

9. For more comprehensive discussions on concordial agreement in Bantu languages in the transformational model see, among others, E.A.Gregersen (1967) in "Prefix and Pronoun in Bantu", *Memoir 21, I.J.A.L.*; Talmy Givón in "Studies in ChiBemba and Bantu Grammar" in *Studies in African Linguistics*, vol. 3, Supplement 3, June 1972; Frank Heny in "Bantu Lexical Classes and Semantic Universals" also in *Studies in African Linguistics*, vol. 3, Number 2, August 1972.

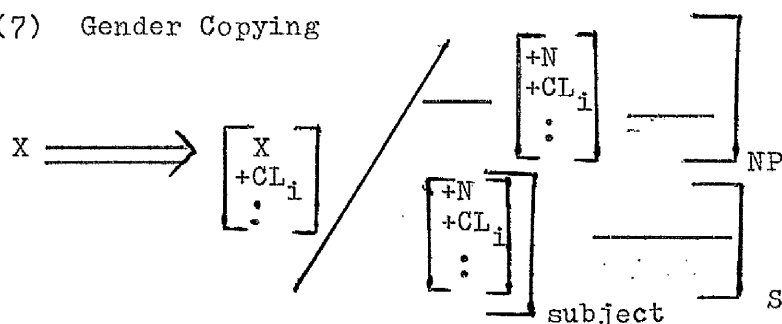
tion were performed simultaneously on both the qualifiers and the predicate.

Givón has proposed a rule which he put in the form of a schema and which goes quite a long way towards resolving concordial agreement in Bantu languages.¹⁰ Following Givón let us first define the categories of lexical item which are concordable in Shona. Let X be such a category.

X \longrightarrow (Adjective) (Demonstrative) (Selector) (Quantifier)
(Possessive) (AUX)

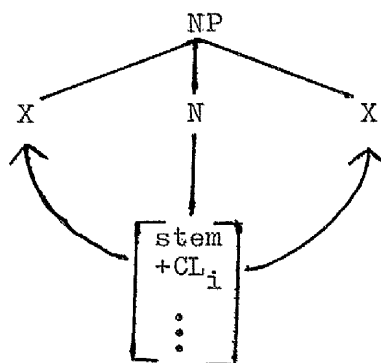
Concordial features will then be spread on to all such items in the relevant positions. The rule then works like this:

Rule (7) Gender Copying



This rule is to be interpreted as follows:

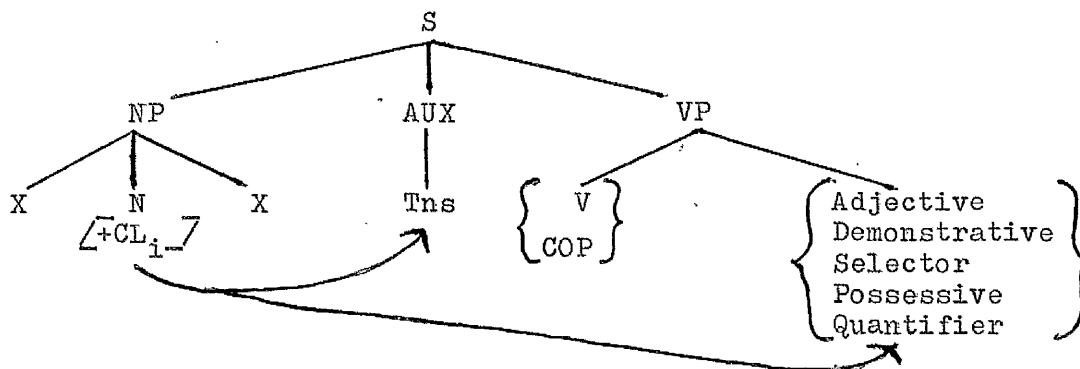
(a) agreement between noun and qualifier (s)



The constituents to which the class affix is copied may occupy a position before or after the controlling noun as illustrated above. (For examples see the noun phrases in (64) above.)

10. op. cit. p.75 - 109

(b) agreement between the subject NP and the predicate



e.g. (i) Chingwa chaiva chishoma.

(The bread was not enough.)

(ii) Tuhukwana tunokwana tuna.

(The chickens add up to four.)

(iii) Zvinhu zvichava zvemwanakomana wake.

(things - will be - of son - his =

The property will be inherited by his son.)

The first case of this rule schema spreads the class feature on to every constituent in the noun phrase in which a given head noun occurs. However I have not found a genuine case of the application of this subpart in Shona. The view adopted in this study is that all the concordable categories are somewhere in the predicate at the time that this rule operates. These categories will therefore acquire the class feature from the application of the second subpart of this rule.

The foregoing discussion does not pretend to have described exhaustively the phenomenon of gender copying in Shona. Far from it. Assumptions were made without justifying them. For the purpose of this study, however, it was sufficient to show in broad outline how gender copying operates in Shona without going into minute details.

5.8 Object Raising (cyclic)

The next rule to be discussed is one whose existence is not so apparent from a casual examination of surface structures as are the

others which we have seen. This transformation helps to explain the synonymy in the following sets of sentences:

(72)a. Tí'cha á'nodá kú'ti vaná vátámbe' bhóra.

(The teacher wants the children to play football.)

b. Tí'cha á'nodá vaná kú'ti vátámbe' bhóra.

(The teacher wants the children to play football.)

c. Vaná' vanodiwa' natí'cha kú'ti vátámbe' bhóra.

(The children are required by the teacher to play football.)

(73)a. Vanhu vazhínj'í' v'anoz'í'v'á kú'ti Ruzvidzo á'nodada.

(Many people know that Ruzvidzo is conceited.)

b. Vanhu vazhínj'í' v'anoz'í'v'á Ruzvidzo kú'ti á'nodada.

(Many people know Ruzvidzo to be conceited.)

c. Ruzvidzo á'nozi'v'í'k'án'wa nev'ánuh' vazhínj'í' kú'ti á'nodada.

(Ruzvidzo is known by many people to be conceited.)

(74)a. Zú'ze á'chaoná' kana basa rá'cho rá'k'án'aká'.

(Zuze will see whether the job is suitable.)

b. Zú'ze á'chaoná' bá'sa rá'cho kana rá'k'án'aká'.

(Zuze will see whether the job is suitable.)

c. Basa rá'cho rí'chaoné'kwá' naZú'ze kana rá'k'án'aká'.

(The job will be seen by Zuze whether it is suitable.)

Since in each set the lexical items in each sentence are the same and the meaning is also the same we would expect these sentences (i.e. the sentences in each set) to have identical deep structures. In (72) for instance, (72b) differs from (72a) in that the noun phrase vaná occurs before the complementizer formative kú'ti; and (72c) differs from (72b) in that it is in the passive. While it is relatively easy to establish the relationship between (72b) and (72c), that is, one is active and the other passive, it is not as easy to relate (72a) and (72b); yet it is the relationship between these two sentences which is crucial here.

Sentence (72a) clearly has as its object noun phrase a comple-

ment clause, namely, kuti vaná vatámbe bhóra. That this clause is functioning as a noun phrase is easily demonstrated. This complement clause passes the tests for object noun phrases as shown below.

(75)a. pseudo-cleft;

Kuti vaná vatámbe bhóra ndízvo zvaánodá tícha.

(That the children play football is what the teacher wants.)

b. object anaphora;

Tícha ánozvídá. (i.e. kuti vaná vatámbe bhóra)

(The teacher wants it. (i.e. that the children play football.)

c. interrogative pro-form;

Tícha ánodá chíí? (reply: kuti vaná vatámbe bhóra)

(The teacher wants what? (reply: that the children play football))

d. passive;

Kuti vaná vatámbe bhóra zvínodiwá natícha.

(That the children play football is wanted by the teacher.)

Now if (72b) shares the same deep structure with (72a) it must be the case that it too contains a sentence as its object noun phrase. But here our tests produce negative results.

(76)a. pseudo-cleft;

*Kuti vatámbe bhóra ndízvo zvaánodá vaná tícha.

b. object anaphora;

*Tícha ánozvídá vaná. (i.e. kuti vatámbe bhóra)

c. interrogative pro-form;

*Tícha ánodá vaná chíí? (reply: kuti vatámbe bhóra)

d. passive;

*Kuti vatámbe bhóra zvínodiwá vaná natícha.

The ungrammaticality of the sentences in (76) shows that the string kuti vatámbe bhóra is not a noun phrase in (72b). This observation seemingly reduces the chances of demonstrating that both (72a) and (72b)

have the same deep structure.

In order to show that these two sentences have the same deep structure, it must be shown that some process has operated on the noun phrase complement in (72b) which destroys its structure as a noun phrase and which creates a new structure which is incapable of passing the tests for object noun phrases. The crucial clue here is to be found in (72c), namely, the existence of the passive transformation. Let us briefly look at the passive transformation again. The structure to which it applies must meet two basic conditions. First, there should be a subject noun phrase and an object noun phrase and these two must not be referentially identical. It is these two noun phrases that the rule will interchange. Second, and for the moment more important, it is necessary for these two noun phrases to be in the same simple sentence as illustrated in the sentences below.

(77)a. Vanhu vānozívá Kení.

(People know Keni.)

b. Kení anozívíkánwa nevānhu.

(Keni is known by people.)

(78)a. Vanhu vānozívá kúti Ruzvidzo ákáponda Kení.

(People know that Ruzvidzo murdered Keni.)

b. Kuti Ruzvidzo ákáponda Kení zvinozívíkánwa nevānhu.

(That Ruzvidzo murdered Keni is known by people.)

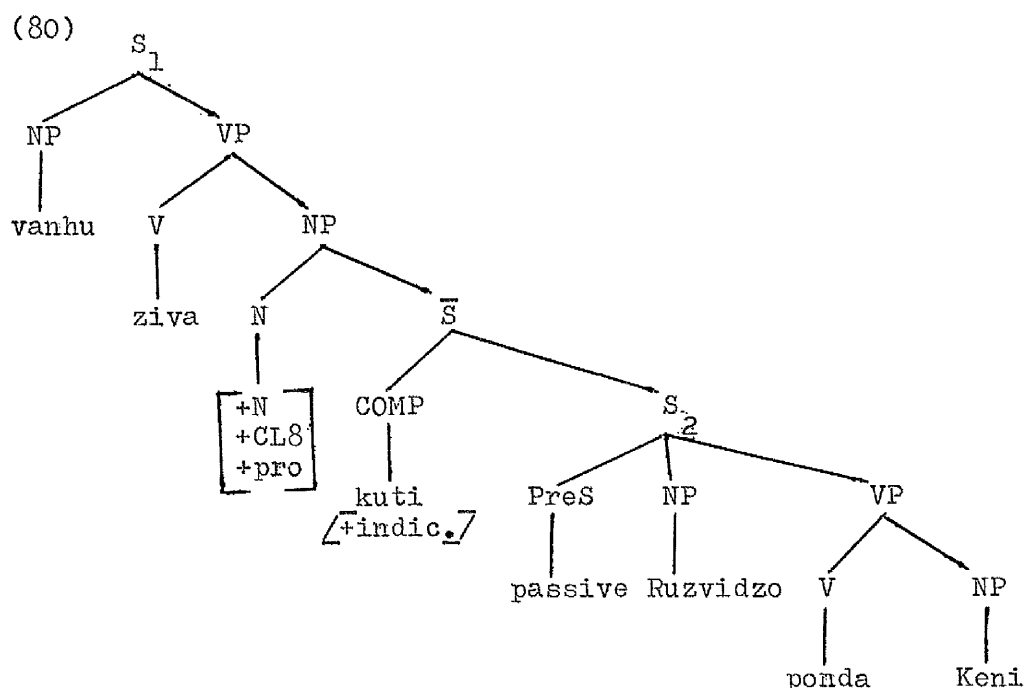
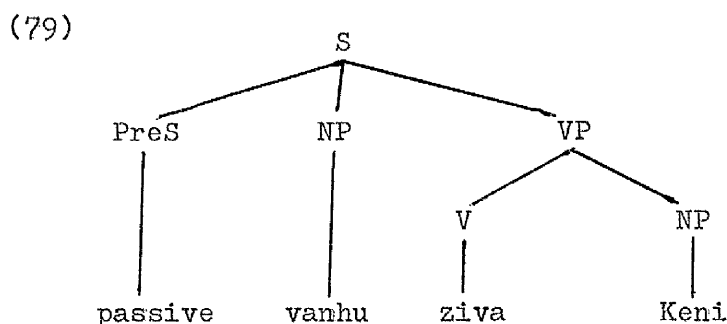
c. *Kení anozívíkánwa nevānhu kuti Ruzvidzo ákáponda.

(*Keni is known by people that Ruzvidzo murdered.)

d. Vanhu vānozívá kúti Kení ákápondwa naRuzvidzo.

(People know that Keni was murdered by Ruzvidzo.)

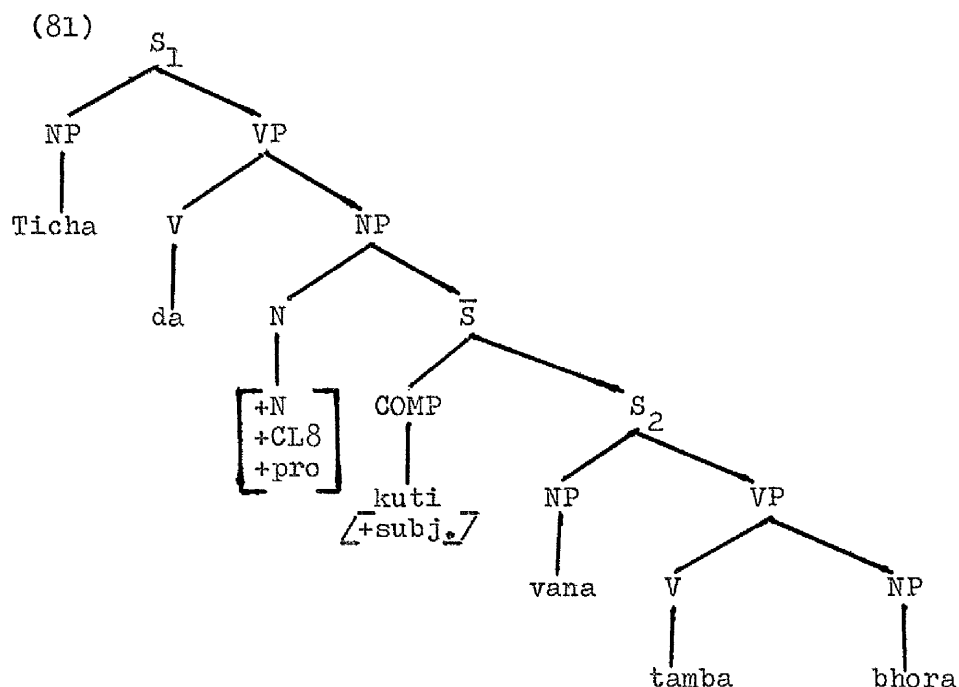
Let us compare the rough deep structures of the sentences in (77b) and (78d) which appear below as (79) and (80) respectively.



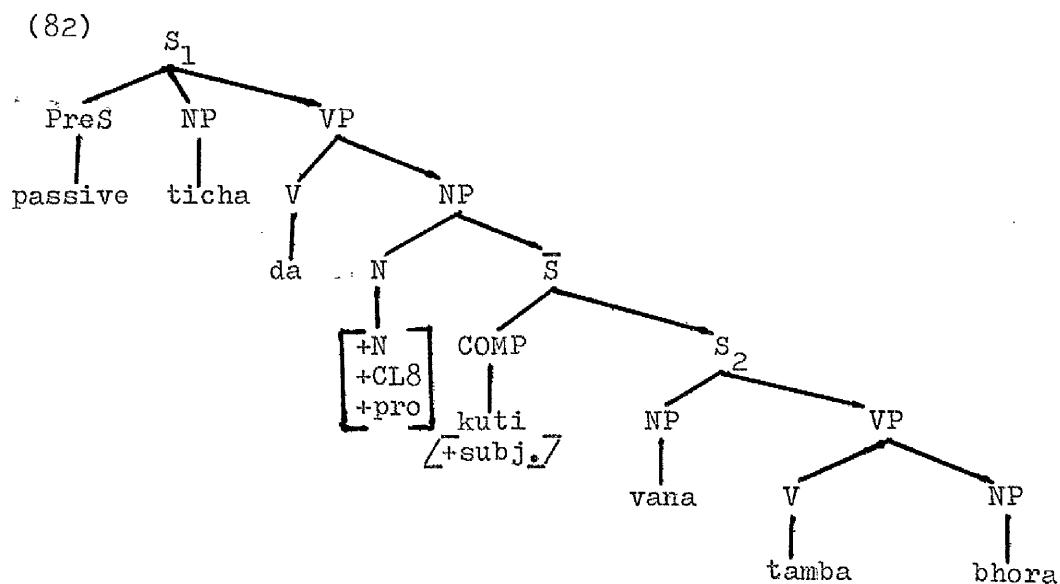
In (79) the two noun phrases which are to be interchanged by the passive are in the same simple sentence. This equally applies to the noun phrases Ruzvidzo and Keni' in (80): the passive can apply and interchange them because they are dominated by the same S, namely, S_2 . Sentence (78c) is ill-formed because the noun phrase Keni', dominated by S_2 , is made to interchange with vanhu which is dominated by another S-node, namely, S_1 . The same applies also to Ruzvidzo in (80): it cannot be interchanged with vanhu while it (i.e. Ruzvidzo) is still under the domination of S_2 . The passive rule cannot apply in such a case.

In order to show that (72a) and (72b) share the same deep structure, the applicability of the passive transformation in (72c) requires some explanation. In particular it must be described how vana,

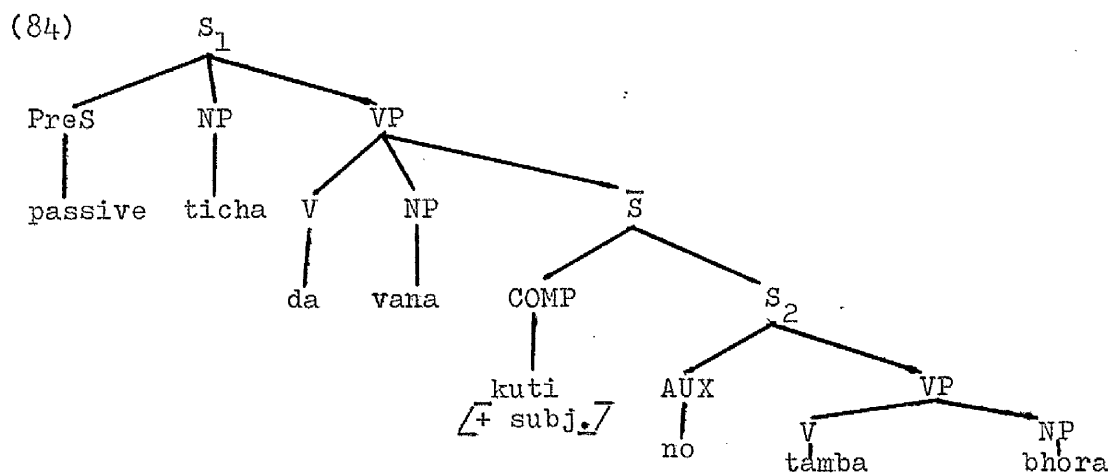
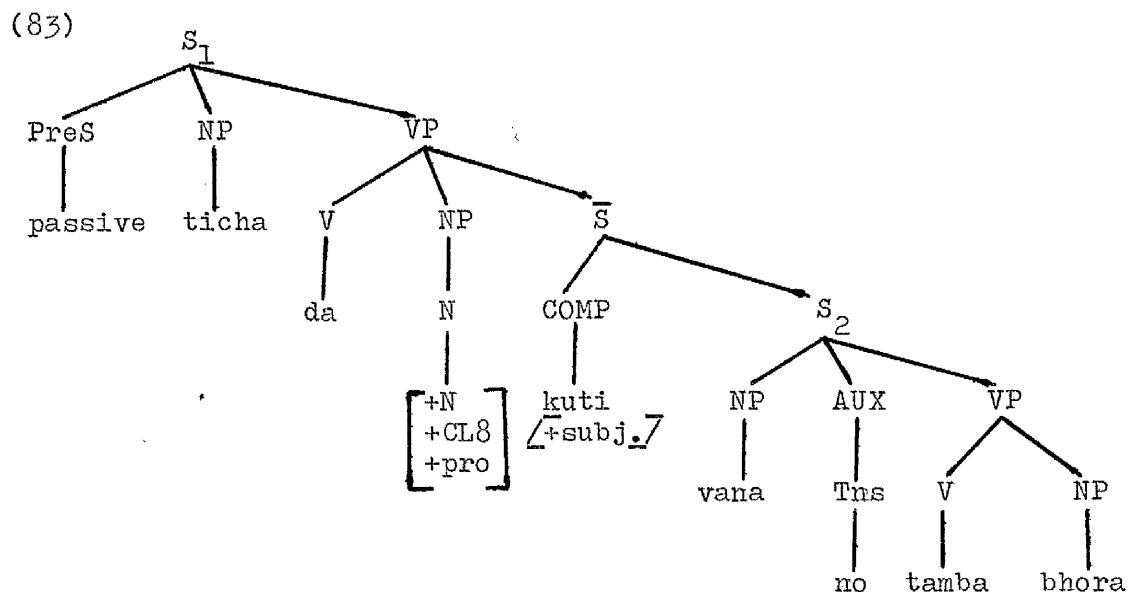
if it originates in the complement clause, comes to be dominated by the higher S. At this stage let us examine the deep structure representation of (72a). This is provided in (81).



Although tícha and vana, and also tícha and bhóra, are not co-referential, none of the noun phrases in either pair can be interchanged by the application of the passive since none is in the same simple S. But in (72c) at some point in the derivation vana must be in the higher sentence otherwise the passive would not apply. The deep structure of (72c) appears below.



In order to resolve this difficulty it is proposed to set up a rule to be called Object Raising.¹¹ This seems to do two things. First, it detaches the noun phrase complement which has one of the following complementizers: kuti [$\bar{+}$ subjunctive], kuti [$\bar{+}$ indicative], kana [$\bar{+}$ participial], from under the NP-node which dominates it and attaches it under the domination of VP of the next higher S.¹² Applied to the structure in (82) this first stage results in the tree structure in (83).



11. cp "it" replacement: (Rosenbaum: 1967a); it-substitution (R. Lakoff: 1968); raising rule (Grinder and Elgin: 1973); raising object (Stockwell et al : 1973).

12. No cases involving this rule have been attested with the other complementizers.

In the second stage this rule substitutes the pronoun head

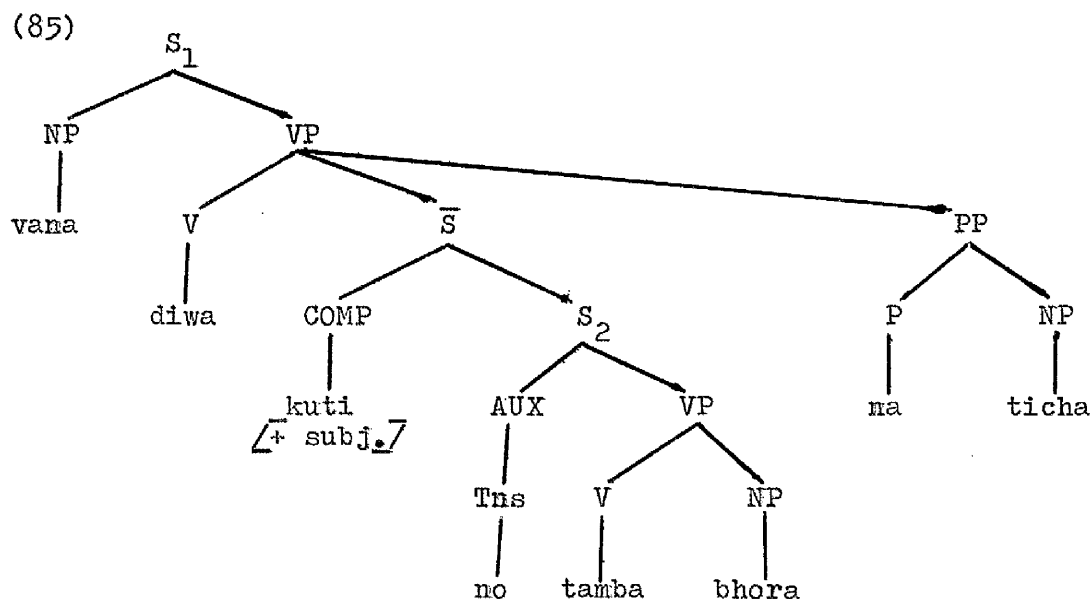
+N
+CL8
+pro

of

the noun phrase which contained the transported complement clause with the subject noun phrase of the complement sentence. This results in the structure in (84) above. If we did not have passive in the deep structure, the structure in (84) would then lead to the derivation of (72b).

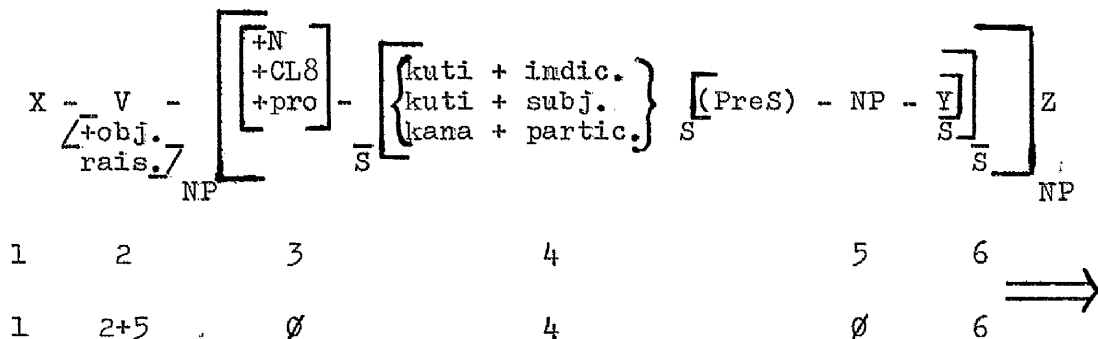
But now we can consider the passive in the higher sentence in (72c). What we observe here is that the object raising transformation has created a structure in the higher S to which the passive can be applied, interchanging the noun phrases tícha and vana. This is now possible because the subject of the complement clause has been moved into the higher S, and the condition for the passive rule, namely, that the interchanging noun phrases should be in the same simple S, is now met. The substituted noun phrase becomes syntactically independent of the embedded sentence to which it belonged in the deep structure, and behaves as if it were the direct object of the higher verb. It is for this reason that the sentences of (76) are ill-formed. The direct object is now vana and not the embedded clause. The embedded clause ceases to be the object noun phrase.

In this case the passive applies after object raising has applied. If in the embedded clause the passive had been present, there would have been a situation in which the passive applied first, then object raising, and then passive again (but in the second cycle this time). Object raising itself is ordered after gender copying otherwise S₂ would be left without a subject concord and this would render the sentence ungrammatical. Applying the passive to the structure in (84) the resulting structure is (85).



This rule may be formalized as follows:

Rule (8) Object Raising



The constituent $\bar{S} \left[\begin{array}{l} 4 \\ \emptyset \end{array} \right] \bar{S}$ in the structural change is now attached

as a daughter node to the VP of the higher S.

By setting up the rule of object raising we are able to account for a number of facts in respect of the sets of sentences in (72) - (74). First, this analysis explains that the (a) and (b) sentences in these sets have the same meaning because they have the same deep structure. The only difference between the (c) sentences and the others is that the former, but not the latter, have the passive specified in their deep structure. Secondly, this analysis explains passivization in the higher S in the (c) sentences by showing how the subject of the embedded

sentence is brought into the higher sentence so that it is in the same simple sentence as the noun phrase with which it interchanges positions. Thirdly, it explains why the sentences in (75) are well-formed while those in (76) are not.

Here are further examples to show how the rule of object raising operates.

(86)a. Taka' akachéréchedza kuti Dhongereri yakanga isipo'.

b. Taka' akachéréchedza Dhongereri kuti yakanga isipo'.

(Taka noticed that Dhongereri was not there.)

c. Dhongereri yakachéréchedzwa naTaka' kuti yakanga isipo'.

(Dhongeri was noticed by Taka that it was not there.)

(87)a. Takawira' anofungidzira kuti Mombe ndiye akaba mari'.

b. Takawira' anofungidzira Mombe kuti ndiye akaba mari'.

(Takawira suspects that it was Mombe who stole the money.)

c. Mombe anofungidzirwa kuti ndiye akaba mari' naTakawira'.

(Mombe is suspected to have stolen the money by Takawira.)

(88)a. Vamwené vakaóna kuti muroóra ane usimbe.

b. Vamwené vakaóna muroóra kuti ane usimbe.

(mother-in-law - saw - that - daughter-in-law - was lazy =

The mother-in-law saw that the daughter-in-law was lazy.)

c. Muroóra akaonekwa kuti ane usimbe naVamwené.

(The daughter-in-law was seen to be lazy by the mother-in-law.)

(89)a. Vanhu vazhinji vanotendera kuti Mwari' ariko'.

b. Vanhu vazhinji vanotendera Mwari' kuti ariko'.

(Many people believe that God exists.)

c. Mwari' anotenderwa kuti ariko' nevanhu vazhinji'.

(God is believed to exist by many people.)

5.9 Subject Raising (cyclic)

While object raising replaces the pronoun head of an object noun phrase by the subject noun phrase of the complement clause, there

is another similar operation which is illustrated in the sentences in (90) - (93).

(90)a. Nyaya iyi zvayadai' zvinoreva' kuti totoenda kudare.

(Since this case has taken this turn it means that we have to go to court.)

b. Nyaya iyi inoreva' kuti totoenda kudare zvayadai'.

(This case forces us to go to court since it has taken this turn.)

(91)a. Kuti Podzorimwa adye sadza nemuriwo' zvinoratidza kuti anga ava nenzara.

(For Podzorimwa to take his sadza with vegetables indicates that he was hungry.)

b. Podzorimwa anoratidza kuti anga ava nenzara kuti adye sadza nemuriwo'.

(Podzorimwa showed that he was hungry by taking his sadza with vegetables.)

(92)a. Zvaita kuti vatezvara vauya.

(It is a good thing that the father-in-law has come.)

b. Vatezvara vaita kuti vauya.

(The father-in-law has done a good thing by coming.)

(93)a. Iwe zvawatora mari yake' zvichakukonzera' kutaure.

(Taking his money as you have done will cause you some trouble.)

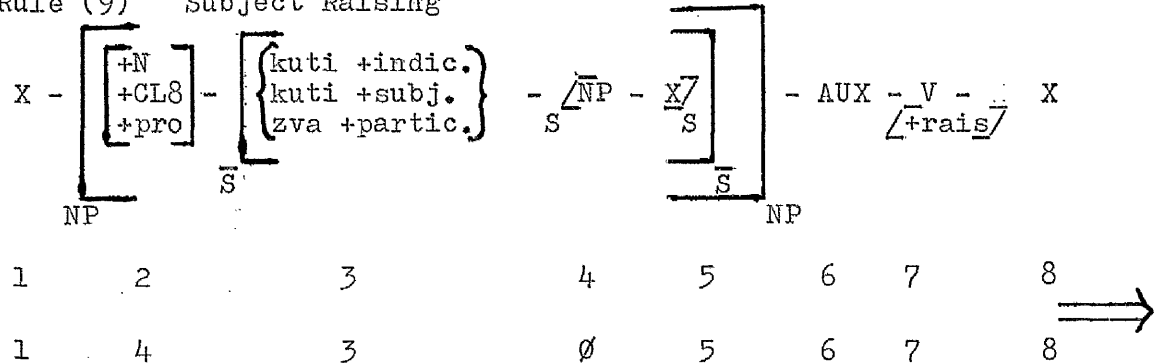
b. Iwe uchazvikonzera' kutaure zvawatora mari yake'.

(You will cause yourself some trouble by taking his money as you have done.)

The sentences in each pair have the same meaning. In the (a) sentences above the underlined noun phrases are the subject noun phrases of the embedded sentences. These same noun phrases, by substituting for the pronoun head, have become the subject noun phrases of the higher S. In

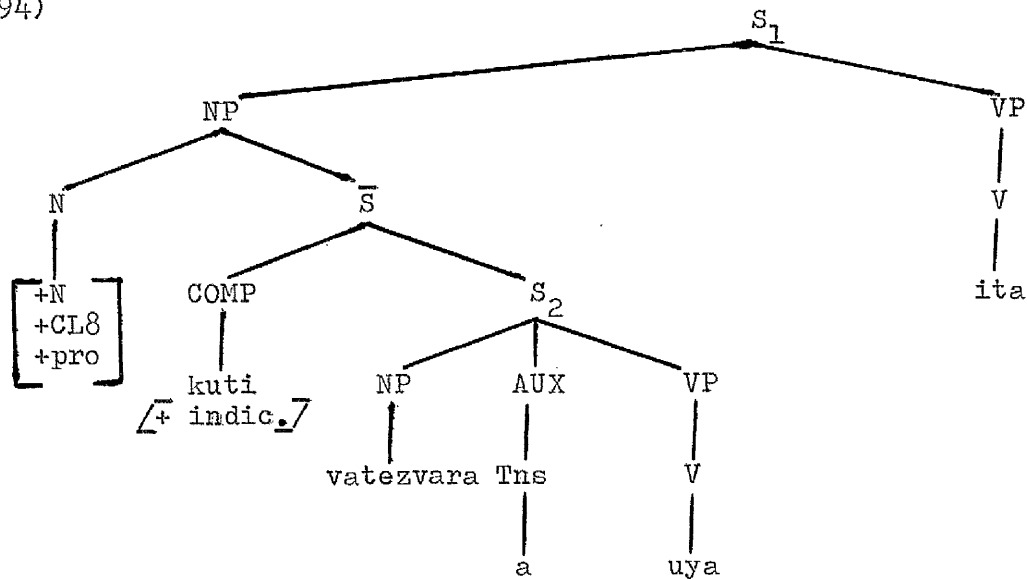
other words the subject noun phrases of the embedded sentences in the (a) sentences have been raised to become the subjects of the higher sentences in the (b) sentences. We shall call this operation Subject Raising. This rule may be represented as follows:

Rule (9) Subject Raising



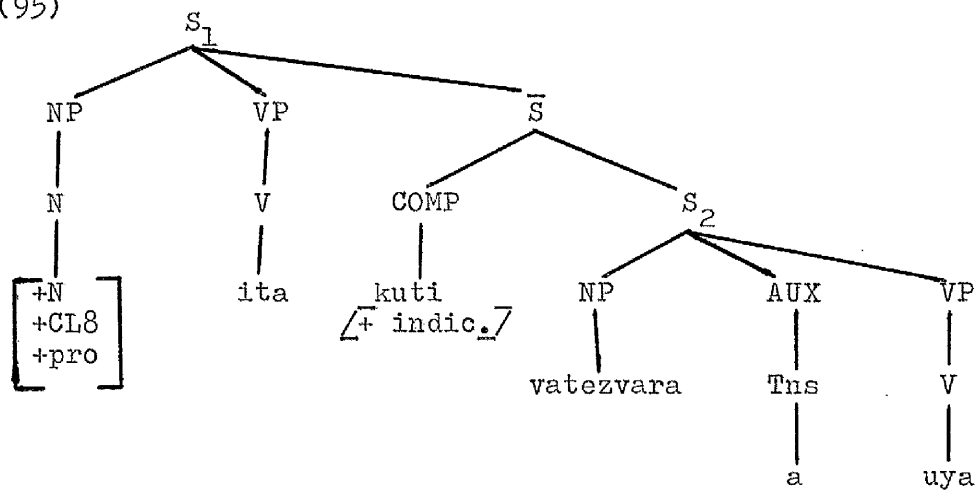
Let us now consider how this rule applies in the derivation of (92b). The deep structure representation of the sentences in (92) is provided in (94).

(94)



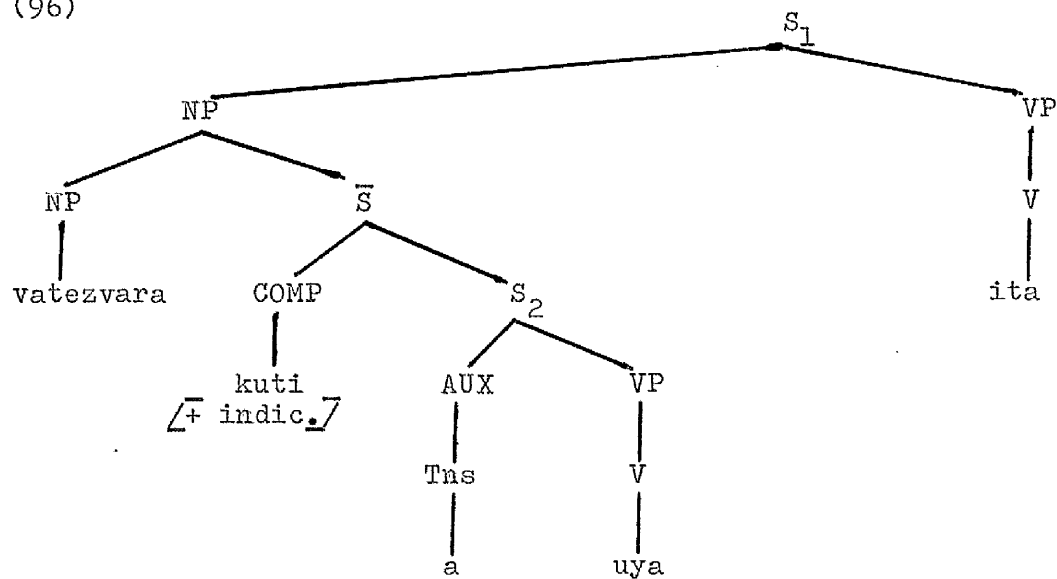
With the verb -ita a complement clause in subject position seems to be extraposed obligatorily to the end of the sentence. Applying the rule of extraposition (see 5.11 for a treatment of this rule) to the structure in (94) the result is the tree in (95). From this structure is eventually derived (92a).

(95)

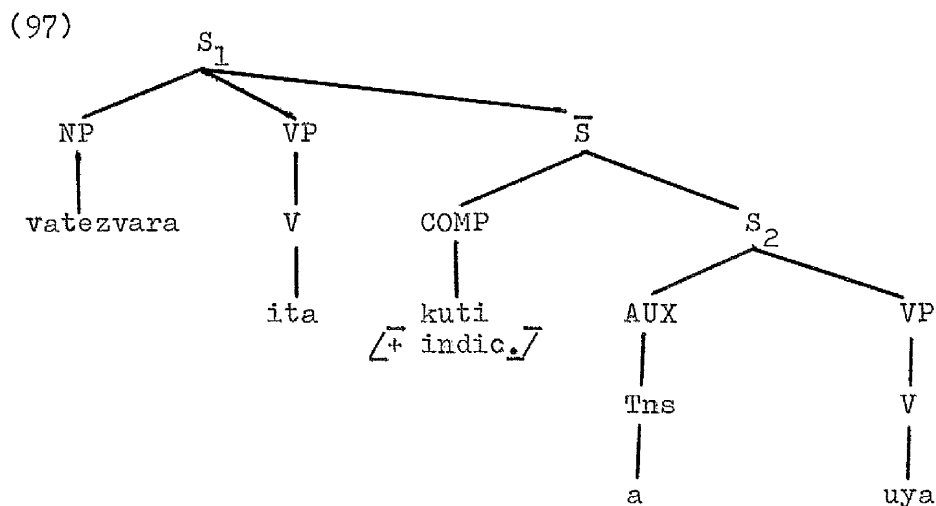


If to the structure in (94) is applied the subject raising rule the resultant structure is (96) below.

(96)



As was the case in (85), because the verb in the higher S is -ita, extraposition applies and this results in (97).



After applying later rules (92b) is derived.

But extraposition after subject raising is on the whole optional as is evidenced by the fact that alongside (90b), (91b) and (93b) there are also such sentences as (98), (99) and (100) respectively in which the embedded sentences in question are underlined.

(98) Nyayá iyi, zvayádai, inorevá kúti tótóenda kudare.

(This case, since it has taken this turn, forces us to go to court.)

(99) Podzorimwá, kuti ádyé sádza némuriwó, anoratidza kuti ánga áva nenzára.

(For Podzorimwa to have his sadza with vegetables shows that he was hungry.)

(100) Iwé, zvawátóra mari'yaké, ucházvikonzera kútaura.

(By taking his money as you have done you will cause yourself some trouble.)

In these sentences subject raising has applied but not extraposition.

A comparison of the sentences in (93a) and (93b) reveals something which strengthens the view that the rule of subject raising exists in Shona. In (93a) the subject, namely, the pronoun head, and the object, namely, iwe (represented here by the object prefix ku) of the main verb -konzera are different. In (93b) however the subject is now iwe but the

object is still iwe. These two noun phrases are now clause-mates, hence reflexivization operates and this is represented by zvi in the sentence. It is quite clear that the subject of the embedded sentence, i.e. iwe, has been raised to become the subject of the containing sentence, thus creating the structure for the reflexive rule to apply.

The rule of subject raising helps to explain why the pairs of sentences in (90) - (93) have the same meaning in spite of their difference in surface structure.

5.10 Equi-NP Deletion (cyclic)

The application of this rule is responsible for the contrast which exists in the following sentences:

(101) Tukómaná utwu túnodá kúti zvipfúwó zvidyé pízi dzángu.

(These small boys want the domestic animals to destroy (lit. eat) my pea crop.)

(102) Tukómaná utwu túnodá kúti túdyé pízi dzángu.

(These small boys want to eat my peas.)

(103) Zvipfúwó zvínodá kúti zvidyé pízi dzángu.

(The domestic animals want to destroy my pea crop.)

In (101) the subject of the embedded sentence, namely zvipfúwó, is present in the surface structure. But in (102) and (103) the subjects of the verbs túdyé and zvidyé are not overtly expressed. Nevertheless the subjects of these predicates can be supplied from the higher sentence. It is quite evident that these subjects are tukómaná utwu and zvipfúwó respectively. What has happened in (102) and (103) may be explained in this way: the subjects of these embedded sentences were present in the deep structure but were subsequently deleted by a transformational rule. The result is that they do not appear in the surface structure.

It is possible to adduce syntactic evidence to show that, for instance, tukómaná utwu is present at some point in the derivation of (102). This is clearly shown by the concord tu in túdyé which is

evidently a reflex of tu in tukómaná. In zvidyé the concord zvi is also clearly a reflex of the zvi in zvipfúwó. Whereas (102) and (103) are grammatical, (104) and (105) are not, precisely because the concord zvi in (104) does not agree with the noun prefix tu in tukómaná, and the concord tu in (105) does not agree with the noun prefix zvi in zvipfúwó.

(104) *Tukómaná utwu túnodá kúti zvidyé pízi dzángu.

(105) *Zvipfúwó zvinodá kúti túdyé pízi dzángu.

(These sentences are however grammatical if the concords zvi and tu in the embedded sentences refer to some noun phrases already mentioned elsewhere in the discourse. The noun phrases to which they refer will have been deleted by Equi-NP deletion in any case.) In (102) the noun phrase tukómaná utwu must have been present in the embedded sentence at some point in the derivation so that gender copying could operate. The same applies to the noun phrase zvipfúwó in (103).

The rule which deletes the subject of the embedded sentence, commonly referred to in the literature as Equi-NP Deletion (Equivalent noun phrase deletion), applies only when the subject of the lower sentence is identical with some noun phrase in the containing sentence, so that the former, when deleted, can be supplied. This rule may be stated as follows:

Rule (10) Equi-NP Deletion

$$X - (NP) - X - \left[\begin{array}{c} \text{kana} \\ \text{kuti} \\ \text{ku} \\ \text{zva} \end{array} \right] S \left[\begin{array}{c} \text{(PreS)} - NP - AUX - \frac{X}{S} \end{array} \right] - X - (NP) - X$$

\overline{S}
 $\underbrace{\hspace{100px}}_{\overline{S}}$

1	2	3	4	5	6	7	8	9	
1	2	3	4	∅	6	7	8	9	⇒

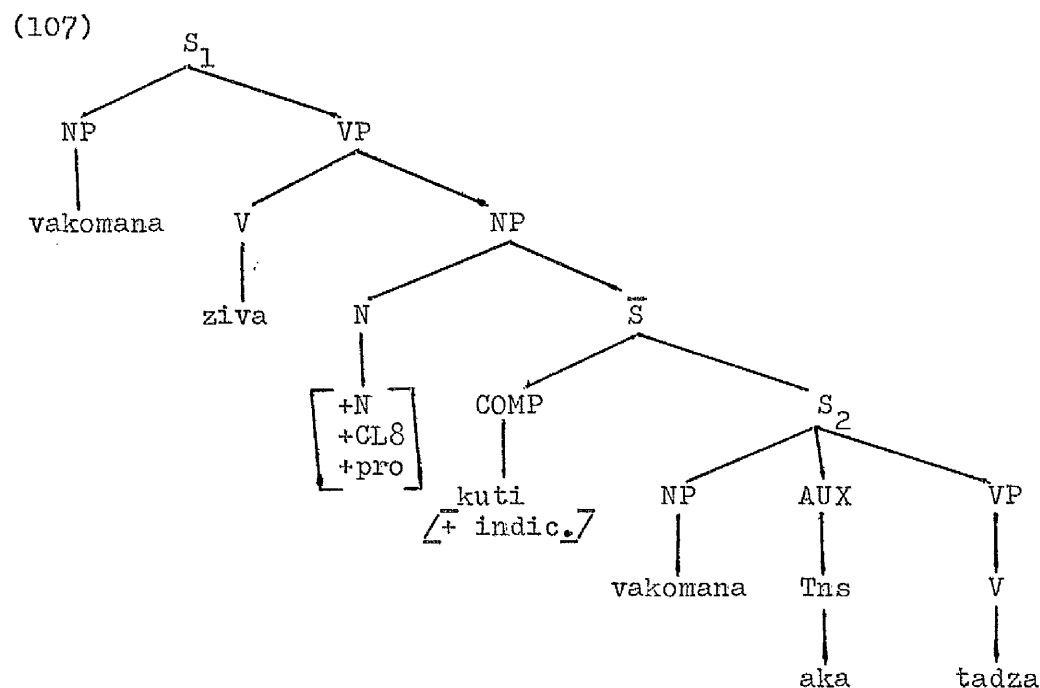
condition: 5 = 2
 or 5 = 8

where 2 or 8 is the NP nearest to 5 in the *S* which is being processed.

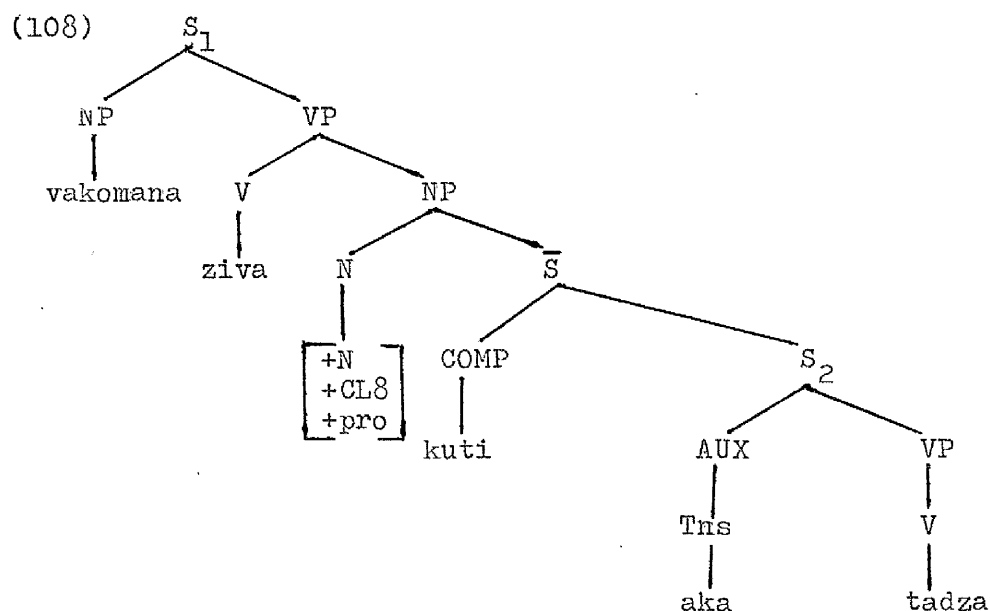
As an example of how this rule operates consider the derivation of the sentence in (106) whose underlying structure is given in (107).

(106) Vakomana' vanozi'va' kuti vakatadza'.

(The boys know that they made a mistake.)



Equi-NP deletion can apply to this structure (taking its proper place in the cycle) since the subjects of the two sentences, namely S_1 and S_2 , are identical. This results in the tree structure in (108).



Later rules will then convert (108) into the superficial form in (106).

5.11 Extraposition (non-cyclic)

Consider the structural relationship that exists between the

sent(109)a. Kuti mwana' aité nungo zvakaipa'.

(For a child to be lazy is bad.)

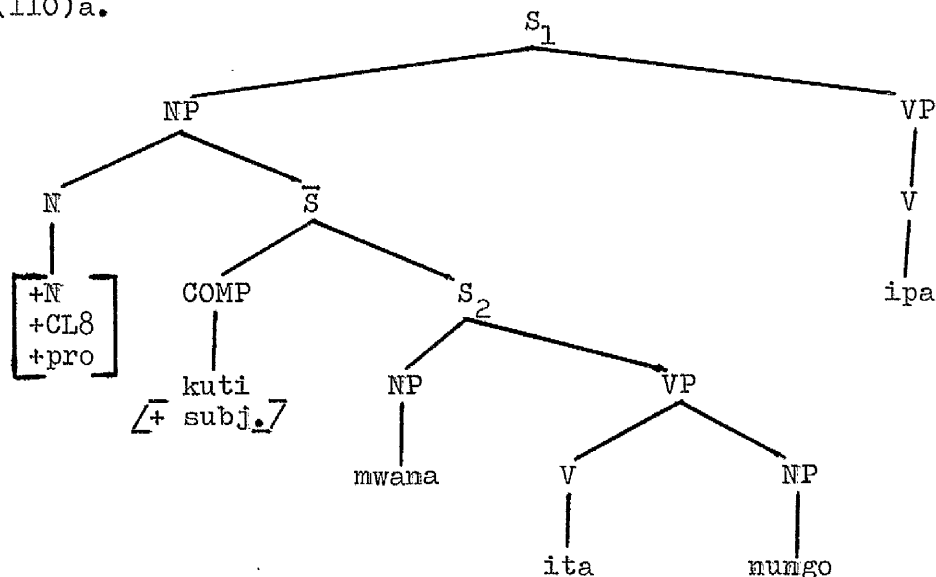
b. Zvakaipa' kuti mwana' aité nungo..)

b. Zvakaipa' kuti mwana' aité nungo.

(It is bad for a child to be lazy.)

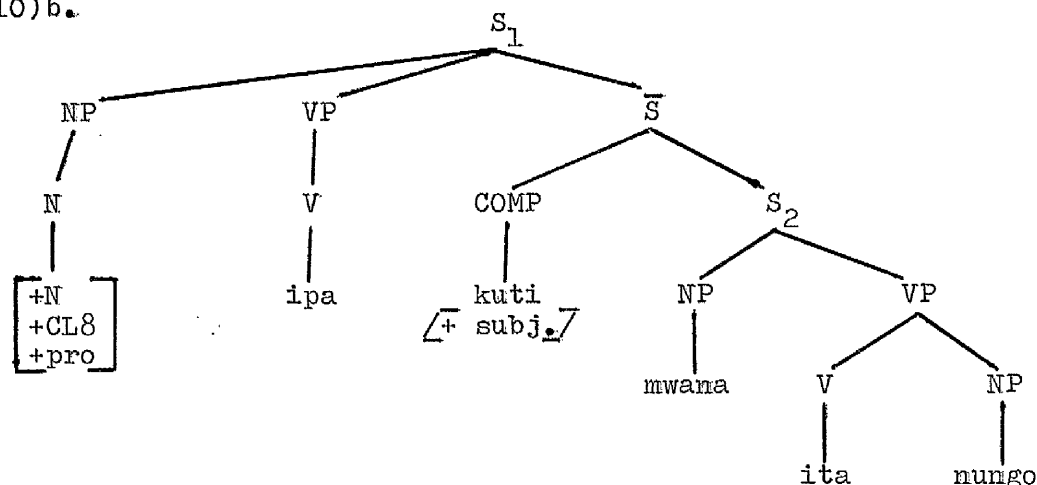
That these two sentences are semantically equivalent is uncontroversial. The main difference between them is structural, that is, in (109a) the complement clause occurs before the main verb while in (109b) it occurs after the main verb. The deep structure of (109a) is (110a) which is highly abbreviated.

(110)a.



The diagram which represents the sentence in (109b) is (110b) below.

(110)b.



It is quite common in Shona for the complement clause of a subject noun phrase to be optionally transported, or extraposed, to the extreme right end of the whole sentence. This extraposition of the complement clause might appear to be the same as Subject Postposing (this rule is discussed in 5.17 below). But it is not the same process. To this end consider the following sentences:

(111)a. *Kuti vátézvara váuya zvaíta.

(That the father-in-law has come is good.)

b. Zvaíta kuti vátézvara váuya.

(It is a good thing that the father-in-law has come.)

As was noted in subsection 5.9, with * -ita as the main verb the complement clause in (111a) seems to be obligatorily extraposed to the end of the higher sentence in order to obtain the well-formed sentence in (111b). Another example where extraposition applies obligatorily can be seen in (112).

(112)a. Vásekuru vátí Píta ákáenda kumushá.

(112)a. Vásekuru vátí Píta ákáenda kumushá. home.)

b. Zvánzi navásekuru Píta ákáenda kumushá.

(It was said by grandfather that Peter went home.)

c. Píta áanzi navásekuru ákáenda kumushá.

(Peter was reported by grandfather to have gone home.)

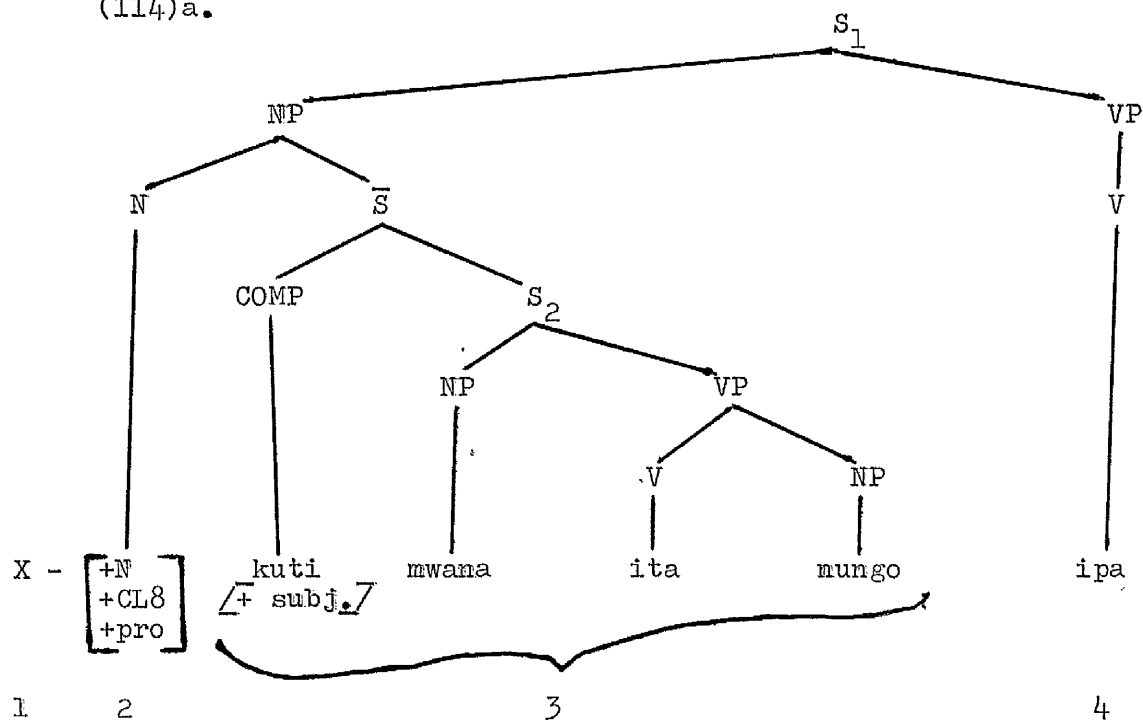
The underlined string in each sentence is the complement clause. In (112b) and (112c) this complement clause has been extraposed. In (112b), first, the passive applies, interchanging the complement clause Pita áka'enda kumushá' with the subject NP vasekuru, then extraposition applies obligatorily taking the embedded clause to the extreme right end of the whole sentence. In (112c), first, the passive applies as in (112b); second, object raising replaces the pronoun head of the subject NP with Pita; then extraposition applies obligatorily. Judging from the examples above it is clear that extraposition is not altogether optional. But subject postposing on the other hand is wholly optional. Besides, the string that is extraposed ceases to behave like a noun phrase in its new position. None of our tests, either for noun phrases in subject position or for noun phrases in object position, will confirm, say, the extraposed complement clauses in (112b) and (112c) as noun phrases.

We might suggest the extraposition rule in (113) as a first approximation of the transformation that relates the sentences in (109) above.

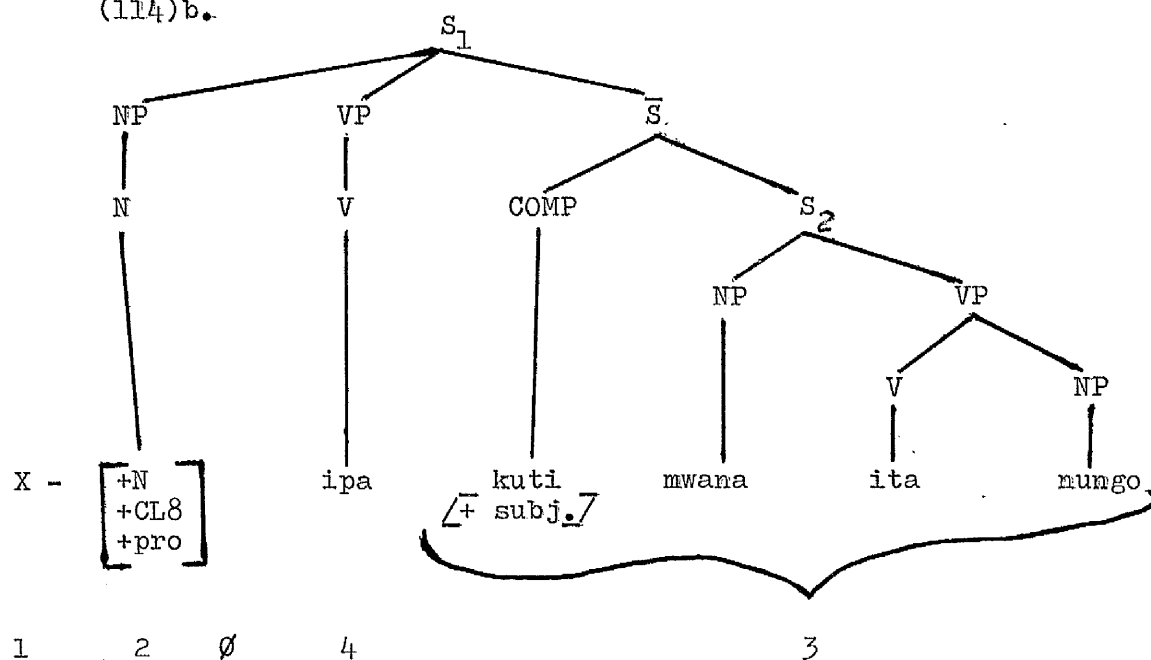
$$\begin{array}{ccccccc}
 (113) & X - & \boxed{\begin{array}{c} +N \\ +CL8 \\ +pro \end{array}} & - \frac{S}{S} \angle \text{COMP} - S \frac{Z}{S} & - X \\
 & & \text{NP} & & \text{NP} & & \\
 & 1 & 2 & 3 & 4 & & \\
 & 1 & 2 & \emptyset & 4+3 & \Rightarrow &
 \end{array}$$

The tree in (110a) which represents the structure that underlies (109a) is properly analysable in regard to the structural description of the extraposition rule and the resulting tree in (110b) is of the form that is specified by the structural change of this rule. The trees in (112a) and (112b) are repeated here as (114a) and (114b) respectively in order to illustrate how this rule operates.

(114)a.

Extraposition →

(114)b.



The formulation of the rule of extraposition as given above in (113) is adequate to account for the relation between the sentences in (109).

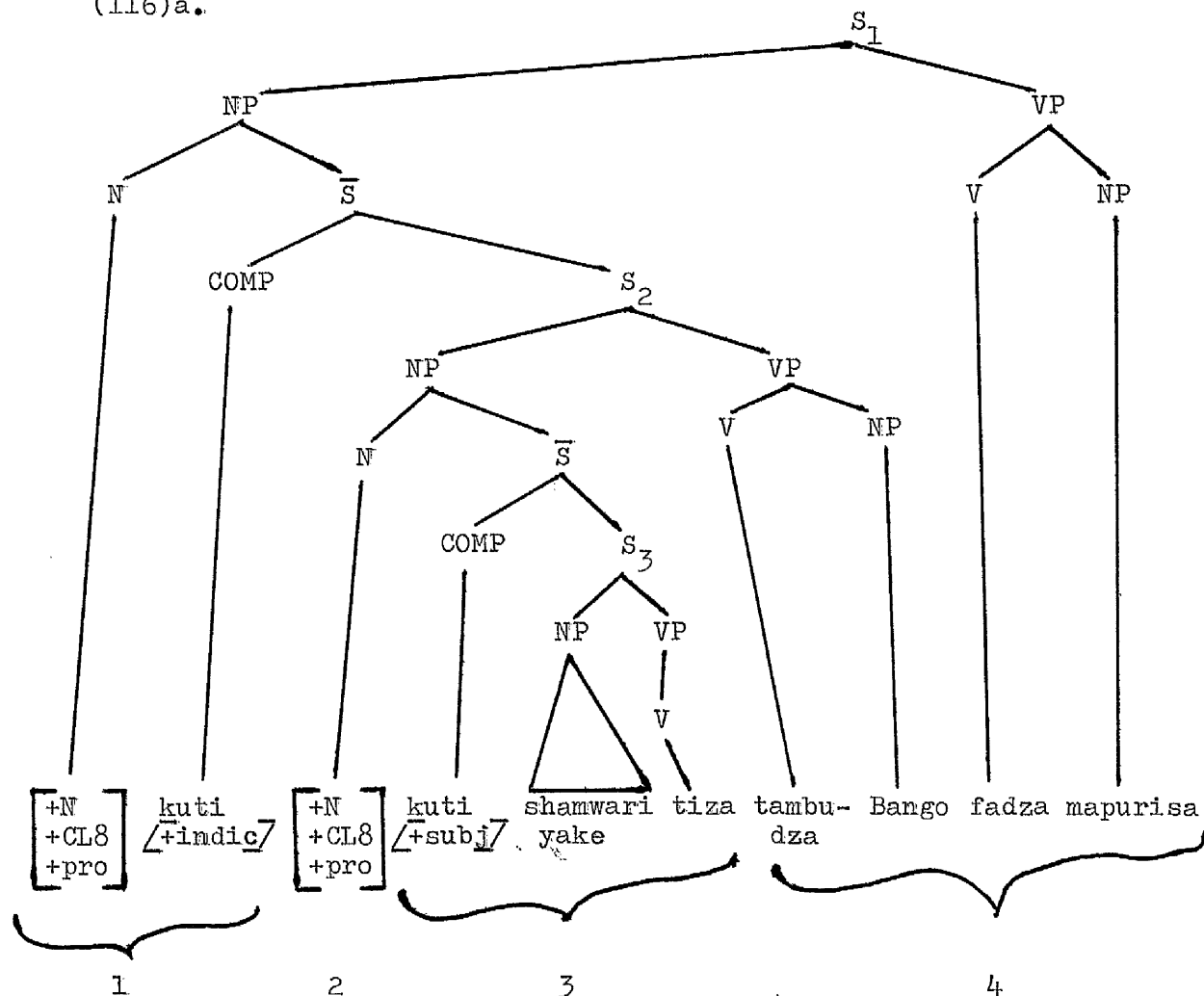
But now let us see what the effect of this rule, as presently formulated, would be on a string like the following:

(115) Kutí, kuti shámwari' yáke' itizé', zvákátámbudza Bango zvákafádza mapurisa.

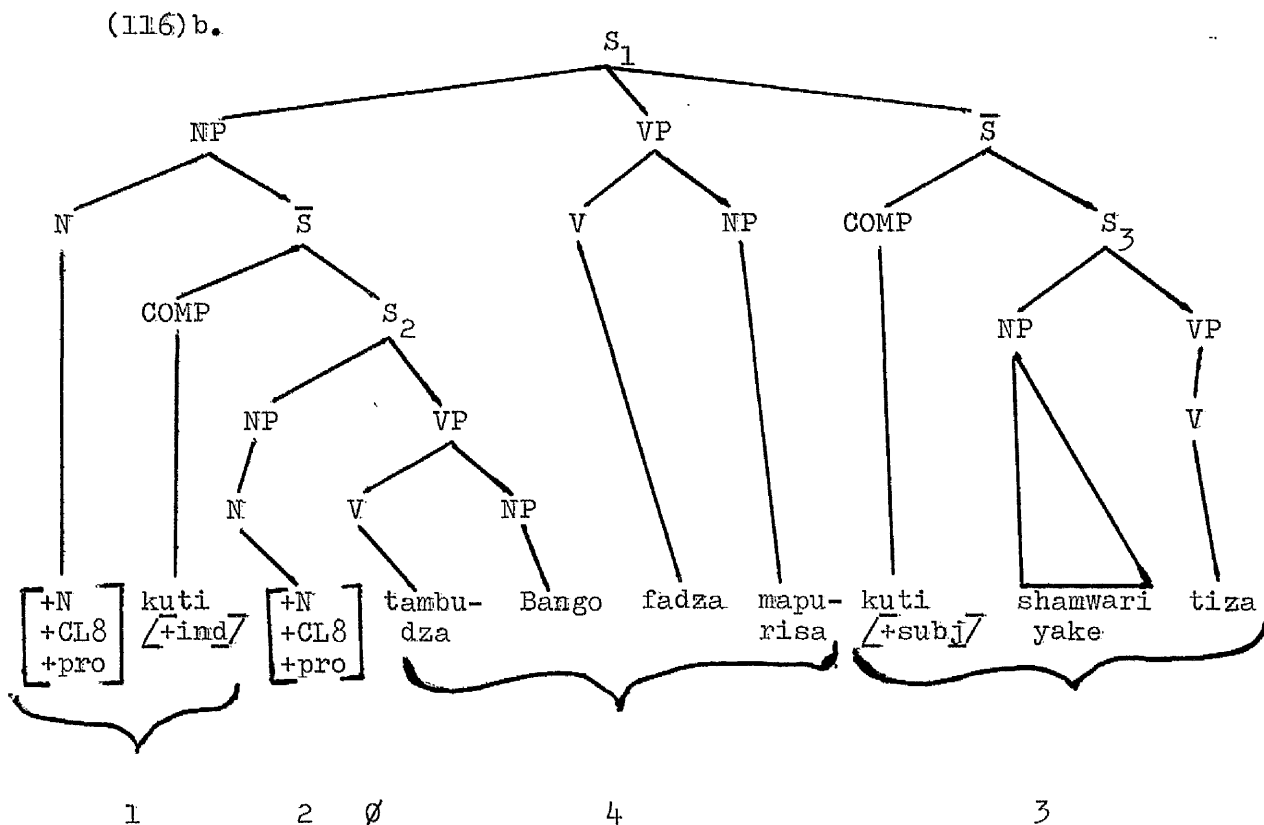
(That that his friend escaped worried Bango pleased the police.)

The deep structure for (115) is something like (116a). Applying the extraposition rule to (116a) will result in (116b).

(116)a.



Extraposition →

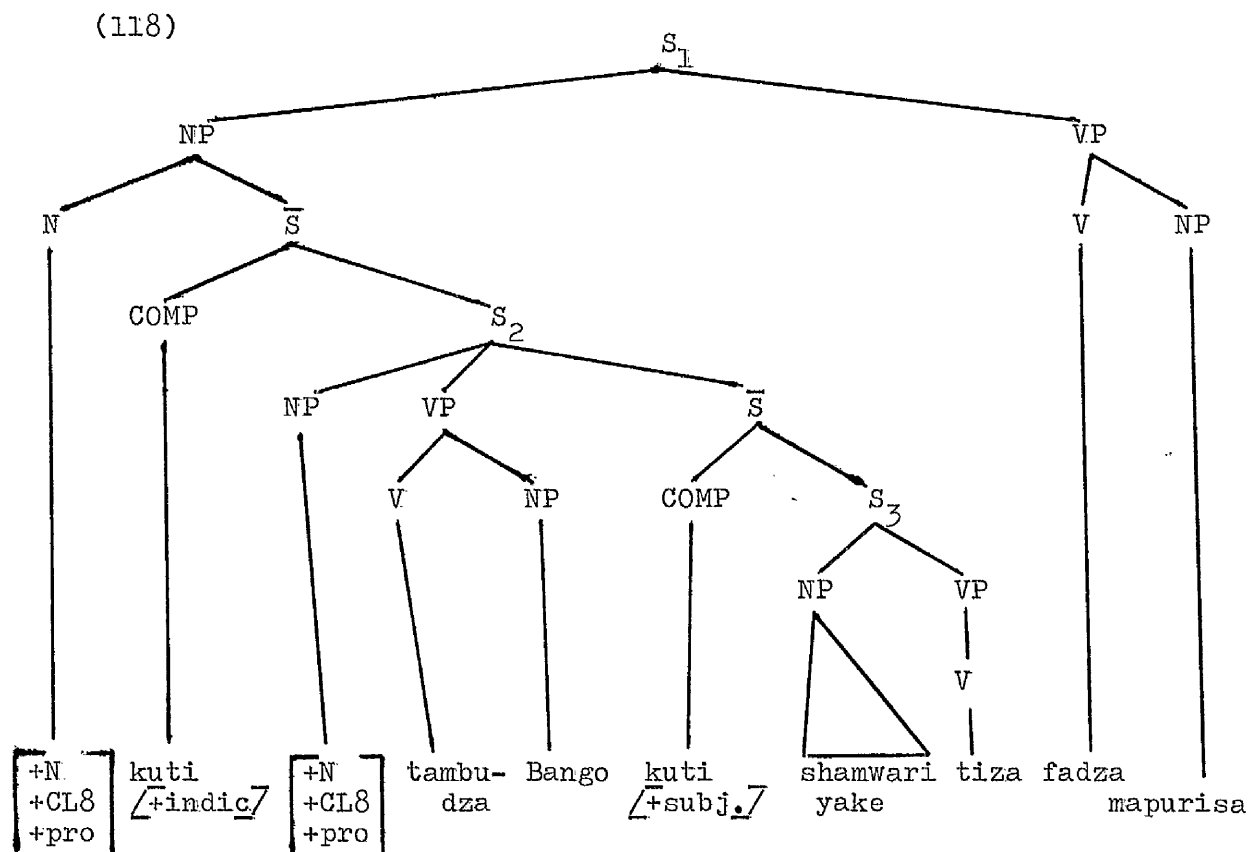


After applying later rules the resulting sentence is (117) which is ungrammatical.

(117) *Kuti zvákátambudza Bango zvákafádza mapúrisa kuti shamwari yake itize.

(*That it worried Bango pleased the police that his friend should escape.)

The ungrammaticality of (117) indicates clearly that our formulation of the extraposition rule in (113) was incorrect. Now let us modify a little the application of this rule to the structure in (116a). Instead of moving term 3 to the extreme right end of S_1 as was done in (116b), let us move it only to the extreme right end of S_2 . The tree configuration which results is (118).



After applying other rules the details of which are not crucial here the sentence we get is (119) which is well-formed.

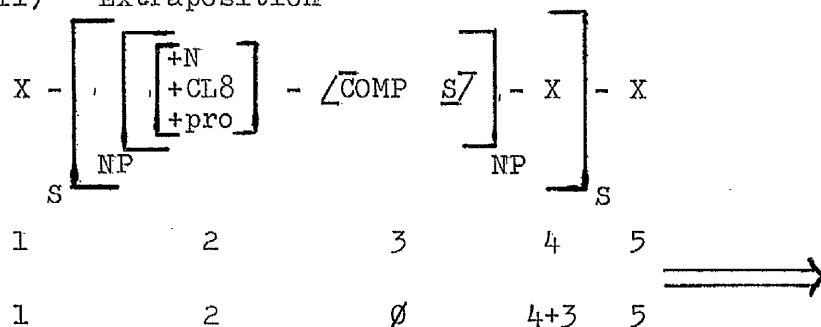
(119) Kuti zvákátámbudza Bango kuti shámwari'yáké itizé zvákafádza mapurisa.

(That it worried Bango that his friend escaped pleased the police.)

From what we observe in (118) and (119) it is obvious that when extraposition applies correctly, transporting a complement clause in subject position, it is sensitive to the constituents over which the complement clause moves. Stated in more precise terms, it can be said that it is sensitive to the structural distance that the complement clause may move. If we compare the structural difference between the grammatical sentence in (119) which is derived from (118) and the ungrammatical sentence in (117) which is derived from (116b) we are provided with the information necessary for a proper formulation of the

rule of extraposition. In formulating this rule there is need to state that the complement clause, which is moved by extraposition, may move only to the end of the clause in which it originates. The rule of extraposition is then reformulated properly in the following way:

Rule (11) Extraposition



If we compare this rule with the one in (113) above we will see that they differ only in the presence of the fifth term on the right hand, which serves to place a right boundary on the term that is moved, namely, term 3. The extraposition rule as reformulated derives the grammatical sentence in (119), but not the ill-formed sentence in (117).

If however Ross's rather persuasive argument, namely, that all rules that move constituents to the right cannot move elements farther than the end of the clause which contains those elements, turns out to be universal, the extraposition rule as formulated in (113) will be adequate.¹³ There will be no need to include the refinement above as it will be true of all right-ward movement transformations. This particular feature of right-ward movement transformations will need to be stated but only once in the general theory of language and will apply equally to all right-ward movement transformations.

13. J.R.Ross (1967) Constraints on Variables in Syntax.

This rule, which applies obligatorily, is ordered after extraposition and gender copying. Term 3 in the structural description is given as either \bar{S} or \emptyset . If extraposition, which we said was optional in the majority of cases, has not applied, term 3 will be \bar{S} , and this will be the case with (120a) and (121a); but if extraposition has applied then term 3 will be \emptyset , and this is the case with (120b) and (121b). That this rule must apply after gender copying is obvious enough. If this ordering is not followed the predicate of the containing sentence will be left without a subject concord and this will render the sentence ungrammatical.

5.13 Object Anaphora (non-cyclic)

If in a sentence there are two identical noun phrases which are not dominated by the same simple S-node ~~and~~ it is the case that not both of them are in subject position, one of the two noun phrases is reduced so that only a pro-form remains. This may occur either within one complex sentence as in (122) and (123) or across sentence boundaries as in (124) below. The noun phrases which are identical as well as their pro-forms are underlined.

(122)a. *Vana₁ vanoziwa kúti tícha ánodá kurówa vana₁.

(*The children₁ know that the teacher wants to beat the children₁.)

b. Vana vanoziwa kúti tícha ánodá kuvarówa.

(The children know that the teacher wants to beat them.)

(123)a. *Kana chibagé chácho₁ chákánaká vanhu vanoténgá chibagé chácho₁.

(*If the corn₁ is good people will buy the corn₁.)

b. Kana chibagé chácho chákánaká vanhu vanochíténgá.

(If the corn is good people will buy it.)

(124)a.i. Mwoyo ádya chingwa chiye.

(Mwoyo ate that bread.)

ii. Séi Mwoyo ádya chingwa chiye?

(Why did Mwoyo eat that bread?)

b.i. Mwoyo ádya chingwa chiye.

ii. Séi Mwoyo achidya?

(Why did Mwoyo eat it?)

In these sentences it is the second of the two identical noun phrases which is reduced to a pro-form. Note also that this operation is obligatory in (122) and (123), that is, when it occurs in one complex sentence, but optional in (124), presumably because it occurs across a sentence boundary.¹⁴ This operation can be put into a formal rule as follows:

$$\begin{array}{ccccccc} \text{Rule (A)} & X & - & \text{NP}_1 & - & X & - & \text{NP}_2 & - & X \\ & 1 & & 2 & & 3 & & 4 & & 5 \\ & 1 & & 2 & & 3 & & \boxed{4} & & 5 \\ & & & & & & & \text{+pro} & & \end{array} \Longrightarrow$$

condition: $2 = 4$ but these two noun phrases should not be dominated by the same S.

14. The concept of sentence boundary here appears to apply at the levels of (a) separate sentences as belonging to two different speakers as in (124) above, and (b) complex sentences which contain such conjunctives as: asi, nokuti, as illustrated in the sentences below.

(a)i. Sara' ánodá' Midzi asi' Sekai' achivénga' Midzi chaizvo.

(Sara loves Midzi but Sekai hates Midzi very much.)

ii. Sara' ánodá' Midzi asi' Sekai' achimuvénga' chaizvo.

(Sara loves Midzi but Sekai hates him very much.)

(b)i. Chibumbu' ánovhima' tsoko nokuti' ánodya' tsoko.

(Chibumbu hunts monkeys because he eats monkeys.)

ii. Chibumbu' ánovhima' tsoko nokuti' ánodzidya.

(Chibumbu hunts monkeys because he eats them.)

Now consider the following sentences:

(125)a. Kama ndáiwana' ndichápa mari'yako' kuma' Taka'.

When I get it I shall give your money to Taka.)

b. Kama ndawana' mari'yako' ndichaipa' kuna' Taka'.

(When I have got your money I shall give it to Taka.)

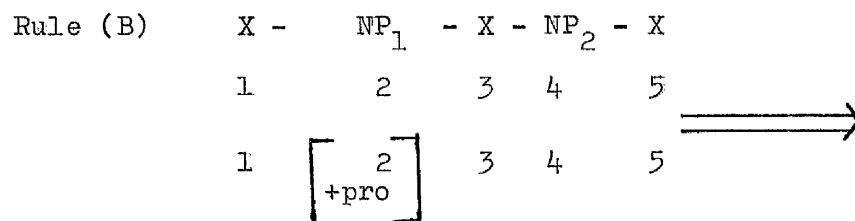
(126)a. Zvawarísvibísa chígeza bhasikoro rácho.

(Since you have soiled it, you wash the bicycle now.)

b. Zvawásvibísa bhasikoro rácho chírigéza.

(Since you have soiled the bicycle, you wash it now.)

In (125a) and (126a) it is the first of the two identical noun phrases which is reduced to a proform, but in (125b) and (126b) it is the second noun phrase which is reduced. In (125a) and (126a) rule (A) above applies in reverse. The operation in (125a) and (126a) may be represented in the form of a rule thus:



In (125a) and (126a) rule (B) has applied to an embedded sentence, and one is tempted to conclude that rule (B) operates only when an object noun phrase in an embedded sentence is reduced. But the following sentences reveal that such a conclusion is fallacious.

(127) Vanhu vano¹chíténgá kana chibagé chácho chakánaká'.

(People will buy it if the corn is good.)

(128) Chirígeza zvawásvibísa bhasikoro rácho.

(You wash it now since you have soiled the bicycle.)

since
Note that [^]these embedded sentences are functionally adverbials they appear in a position after the main verb in deep structure by convention. In the two sentences immediately above rule (B) has applied to the noun phrase in the matrix clause. It would appear therefore that in Shona

the constraint found in English, namely, that if the first of the two identical noun phrases is reduced, it must be dominated by an embedded clause which does not dominate the second noun phrase, does not apply.

We can reformulate this rule in a slightly different way in anticipation of conflating it with rule (A).

$$\begin{array}{ccccccccc}
 X & - & NP_1 & - & X & - & NP_2 & - & X \\
 5 & & 4 & & 3 & & 2 & & 1 \\
 5 & & \boxed{\begin{array}{c} 4 \\ +pro \end{array}} & & 3 & & 2 & & 1
 \end{array}
 \Longrightarrow$$

It can be seen that this rule is a mirror image of rule (A) above. That is, it applies in the opposite direction, from right to left. Our grammar is simplified if these two rules, which are identical save that they apply in opposite directions, can be conflated. This is possible if we invoke one of the provisions of Langacker's mirror image convention, which says that two rules can be collapsed if they contain exactly the same terms in their structural descriptions and output sequences.¹⁵ I shall adopt his notation of marking the structural description of a mirror image rule with an asterisk. Thus, rule (13) collapses rules (A) and (B) above.

Rule (13) Object Anaphora

$$\begin{array}{ccccccccc}
 *X & - & NP_1 & - & X & - & NP_2 & - & X \\
 1 & & 2 & & 3 & & 4 & & 5 \\
 1 & & 2 & & 3 & & \boxed{\begin{array}{c} 4 \\ +pro \end{array}} & & 5
 \end{array}
 \Longrightarrow$$

condition: $2 = 4$ but the two noun phrases should not be dominated by the same simple S.

What this rule says is that, when this structure index is met, either

15. For mirror image rules see R.W.Langacker in "Mirror Image Rules 1: Syntax" in Language, vol.45, Number 3 (1969) p.575 - 598.

term 2 or term 4, but not both, is reduced to a pro-form. As was mentioned elsewhere above this rule is on the whole obligatory. It is optional only across sentence boundaries. Note that, however, across sentence boundaries it applies only from left to right but not in the other direction.¹⁶

5.14 Object Focussing (non-cyclic)

When it is intended to focus attention on the object noun phrase this is achieved by moving the object noun phrase out from its position and placing it at the end of the sentence, then substituting a pro-form in its place. This is illustrated below.

(129)a. Kuba kwakatáyísa' vakomana' ava pfungwa' chaí'vo.

(Stealing really made these boys lose their mind.)

b. *Kuba kwakatáyísa' pfungwa' vakomana' ava chaí'vo.

(*Stealing caused the mind to lose these boys very much.)

c. Kuba kwakavátáyísa' pfungwa' chaí'vo vakomana' ava.

(Stealing really made these boys lose their mind.)

(130)a. Ndarátidza mwana' uye váteté váké.

(I showed that child his aunt.)

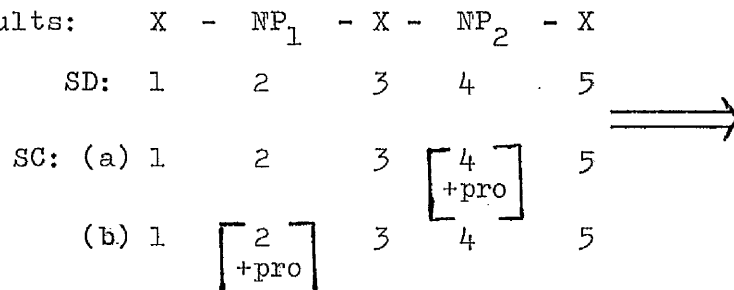
b. *Ndarátidza váteté váké mwana' uye.

(*I showed his aunt that child.)

c. Ndamúratidza váteté váké mwana' uye.

(I showed that child his aunt.)

16. In place of Rule (13) the following schema may be adopted with the same results:

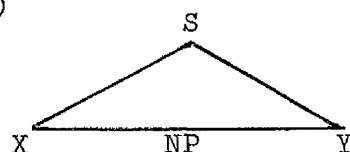


For an argument against mirror image rules see Jorge Hankamer in "On the Nonexistence of Mirror Image Rules in Syntax" in Syntax and Semantics, vol. 1, John P. Kimball (editor)

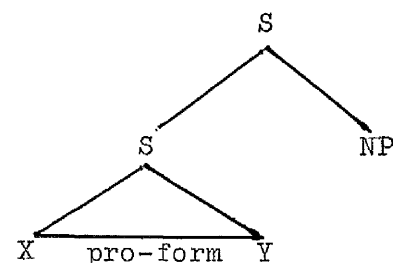
In (129a) the object noun phrases, vakomana'ava and pfungwa', have a fixed linear order.¹⁷ That is, they must follow each other in that sequence, the latter constituting a part or a fraction of the former. The sequence of the two object noun phrases in (130a), though not exhibiting the inalienable relationship, is fixed also, that is, mwana'uye preceding vatete'vake'. If the order of these object noun phrases is reversed the resulting strings are ungrammatical as (129b) and (130b) show. But in (129c), and also in (130c), because there are pro-forms, namely, va and mu respectively, which have been left behind, the first object NP in each sequence can be moved comfortably to the end of the sentence yielding a grammatical sentence. The object NP so moved, or focussed, appears to be set apart from the rest of its clause. Besides being transported from its position this object NP seems to be marked by a potential slight pause or "comma intonation". This comma intonation sets off this transported noun phrase from the rest of the clause.

The transformation which gives rise to object focussing applies to structures which have the phrase marker in (131) and derives from them structures of the form in (132).

(131)

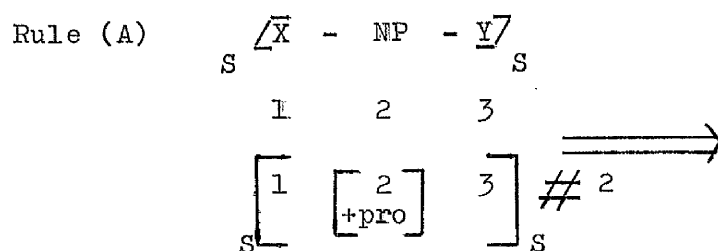


(132)



The rule which is needed to derive (129c) from (129a), and (130c) from (130a), is roughly as follows:

17. Such object complements are treated at some length by N.C. Dembetembe in Verbal Constructions in Korekore, an unpublished M.Phil. Dissertation, London, (1969) p.55 - 64.



where NP is an object complement.

This rule applies to a structure that is exhaustively dominated by S, adjoins to a copy of the noun phrase in question within that structure as a sister to S, and marks the original NP as a pro-form.¹⁸

Object focussing does not always consist of taking out a noun phrase and moving it to the extreme right end of its clause as in the sentences in (129c) and (130c). Object focussing can also optionally transport an object noun phrase to the left end of its clause. In the examples which follow the sentences in (129c) and (130c) above appear with the focussed noun phrase transported to the left end as in (133) and (134) respectively.

(133) Vakómaná áva, kuba kwakátáyísa pfungwá. chaizvo.

(As for these boys stealing has really made them lose their mind.)

(134) Mwana úye, ndamúratidza váteté vaké.

(As for that child I have shown him his aunt.)

In (133) and (134) the comma intonation is even more pronounced than previously, suggesting strongly that vakómaná áva and mwana úye are set off from the rest of their respective clauses. In order to characterize the process that has taken place in (133) and (134) it would appear that there is need of a transformational rule of the following form:

18. For more information on dislocation transformations see Langacker
Ibid. p.589.

$$\begin{array}{c}
 \text{Rule (B)} \quad \begin{array}{ccc} \overline{Y} & - & \text{NP} & - & \overline{X} \\ S & & & & S \end{array} \\
 \begin{array}{ccc} 3 & 2 & 1 \end{array} \\
 2 \neq \begin{array}{c} \boxed{3} \\ S \end{array} \begin{array}{c} \boxed{2} \\ \text{+pro} \end{array} \begin{array}{c} \boxed{1} \\ S \end{array} \Longrightarrow
 \end{array}$$

Note that rule (B) has been formulated with a view to collapsing it with rule (A) later. Notice also that the meaning of (129c) and (133) is the same, so is that of (130c) and (134). Evidently rules (A) and (B) are similar in a significant manner. There is need, it seems, of establishing some notational device which will allow these two rules to be conflated so that their similarity can be captured. Owing to the bidirectional character of object focussing the mirror image convention suggests itself. Notice that these two rules satisfy one of the provisions of this convention (see p. 231). In this case the output sequences are taken to consist of four terms, and not three. The fourth term is term 2 which as pointed^{out} earlier is set off from the rest of the clause. Allowing for this extension these two rules can be collapsed into one rule.

Rule (14) Object Focussing

$$\begin{array}{c}
 * \begin{array}{ccc} \overline{X} & - & \text{NP} & - & \overline{Y} \\ S & & & & S \end{array} \\
 \begin{array}{ccc} 1 & 2 & 3 \end{array} \\
 \begin{array}{c} \boxed{1} \\ S \end{array} \begin{array}{c} \boxed{2} \\ \text{+pro} \end{array} \begin{array}{c} \boxed{3} \\ S \end{array} \xRightarrow{\neq 2}
 \end{array}$$

This rule is to be interpreted as follows: it takes out of *S* the second term and places it by Chomsky adjunction either to the right end or to the left end of *S*, leaving a pro-form behind.

5.15 Object Copying (non-cyclic)

The object copying rule is a simple rule which applies only after the rules of object anaphora and object focussing. What it does

is to copy the class feature $\overline{[+CL_i]}$ and the pro feature $\overline{[+pro]}$ of an object noun phrase on to the verb. It is an obligatory rule. The rule may be represented formally as follows:

Rule (15) Object Copying

$$\begin{array}{ccccccc}
 X & - & V & - & \boxed{\begin{array}{c} NP \\ +CL_i \\ +pro \end{array}} & - & Y \\
 1 & & 2 & & 3 & & 4 \\
 1 & & \boxed{\begin{array}{c} 2 \\ +CL_i \\ +pro \end{array}} & & \emptyset & & 4
 \end{array} \Longrightarrow$$

The application of this rule is very similar to that of the second subpart of the gender copying rule discussed in 5.7 above. While the latter copies the class feature on to the auxiliary, the former copies it on to the verb.

5.16 Noun Prefix (segment) rule (non-cyclic)

This rule, which is obligatory, applies only after gender copying and object copying. What it says is that whenever there is a term with a class feature $\overline{[+CL_i]}$, realize $\overline{[+CL_i]}$ as a noun prefix before the term from which it is copied. If we have, for instance, a noun with these features $\overline{[+punu, +CL_7, \text{----- spoon}]}$, this rule says that the feature $\overline{[+CL_7]}$ must be realized as a prefix thus:

$$\boxed{\begin{array}{c} punu \\ +N \\ +CL_7 \\ \vdots \\ spoon \end{array}} \Longrightarrow \boxed{\begin{array}{c} prefix \\ +CL_7 \end{array}} + \boxed{\begin{array}{c} punu \\ +N \\ +CL_7 \\ \vdots \\ spoon \end{array}}$$

When formalized this rule is:

Rule (16) Noun Prefix (segment)

$$\begin{array}{ccccccc}
 X & - & \boxed{\begin{array}{c} Y \\ +CL_i \\ \vdots \end{array}} & - & Z & & \\
 1 & & 2 & & 3 & & \\
 1 & & \boxed{\begin{array}{c} prefix \\ +CL_i \end{array}} + 2 & & 3 & &
 \end{array} \Longrightarrow$$

After applying later rules, including the one which spells $\overline{+CL7}$ as the prefix chi, the result is the noun chipunu (a spoon). This rule places the concords in their proper positions, that is, to the immediate left of the terms from which they will have been copied.

5.17 Subject Postposing (non-cyclic)

It is not uncommon in Shona to find the subject noun phrase transposed from its underlying position, which is before the auxiliary, to the end of the sentence. This transformation, it would appear, has the effect of focussing attention on the predicate. The (b) sentences in the following pairs have their subjects placed at the extreme right end.

(135)a. $\text{Ho}^{\prime}\text{pe}^{\prime} \text{ dz}^{\prime}\text{a}^{\prime}\text{ba}^{\prime}\text{ta} \text{ a}^{\prime}\text{ma}^{\prime}\text{i} \text{ v}^{\prime}\text{a}^{\prime}\text{ye} \text{ z}^{\prime}\text{vi}^{\prime}\text{no}^{\prime}.$

(Sleep has overwhelmed that woman now.)

b. $\text{Dz}^{\prime}\text{a}^{\prime}\text{ba}^{\prime}\text{ta} \text{ a}^{\prime}\text{ma}^{\prime}\text{i} \text{ v}^{\prime}\text{a}^{\prime}\text{ye} \text{ z}^{\prime}\text{vi}^{\prime}\text{no}^{\prime} \text{ ho}^{\prime}\text{pe}^{\prime}.$

(Sleep has now overwhelmed that woman.)

(136)a. $\text{Chi}^{\prime}\text{ta} \text{ i}^{\prime}\text{no}^{\prime}\text{m}^{\prime}\text{ha}^{\prime}\text{nya} \text{ cha}^{\prime}\text{i}^{\prime}\text{z}^{\prime}\text{vo}.$

(lit. A cheetah runs indeed = A cheetah is a fast animal.)

b. $\text{i}^{\prime}\text{no}^{\prime}\text{m}^{\prime}\text{ha}^{\prime}\text{nya} \text{ cha}^{\prime}\text{i}^{\prime}\text{z}^{\prime}\text{vo} \text{ chi}^{\prime}\text{ta}.$

(It is a fast animal, a cheetah.)

(137)a. $\text{Mu}^{\prime}\text{dz}^{\prime}\text{i}^{\prime}\text{ma}^{\prime}\text{i} \text{ u}^{\prime}\text{yu} \text{ ha}^{\prime}\text{a}^{\prime}\text{na}^{\prime} \text{ m}^{\prime}\text{wa}^{\prime}\text{na}^{\prime} \text{ a}^{\prime}\text{no}^{\prime}\text{ro}^{\prime}\text{h}^{\prime}\text{wa}^{\prime} \text{ no}^{\prime}\text{mu}^{\prime}\text{dz}^{\prime}\text{i}^{\prime}\text{dz}^{\prime}\text{i}^{\prime}\text{si}.$

(This woman has no child who can be beaten by a teacher.)

b. $\text{Ha}^{\prime}\text{a}^{\prime}\text{na}^{\prime} \text{ m}^{\prime}\text{wa}^{\prime}\text{na}^{\prime} \text{ a}^{\prime}\text{no}^{\prime}\text{ro}^{\prime}\text{h}^{\prime}\text{wa}^{\prime} \text{ no}^{\prime}\text{mu}^{\prime}\text{dz}^{\prime}\text{i}^{\prime}\text{dz}^{\prime}\text{i}^{\prime}\text{si} \text{ mu}^{\prime}\text{dz}^{\prime}\text{i}^{\prime}\text{ma}^{\prime}\text{i} \text{ u}^{\prime}\text{yu}.$

(She has no child who can be beaten by a teacher, this woman.)

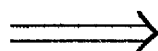
We can formalize this rule in this manner:

Rule (17) Subject Postposing

$X - \underset{S}{\overline{NP}} - \underset{S}{Y} - Z$

1 2 3 4

1 \emptyset 3+2 4



5.18 Rule Ordering and the Notion of the Cycle

Two types of rule ordering may be distinguished, namely, intrinsic and extrinsic ordering of rules. While the former is generally accepted without much difficulty, the latter is a very controversial topic. For some discussion on this matter, see Chomsky: 1965a; Postal: 1968b; G.Lakoff: 1968a; Ringen: 1972; and Koutsoudas: 1972. I shall not pursue the topic of extrinsic rule ordering at any length as it is not really crucial to my main study. For the purpose in hand I have however assumed partial~~extrinsic~~ rule ordering. What requires comment though is the notion of the cycle. I labelled some of the rules discussed in this chapter cyclic and others non-cyclic implying preference for a cyclic grammar. May I point out that this preference is to a large extent arbitrary for there is as yet no compelling evidence to make one choose the cyclic grammar to, say, a linear grammar on empirical ~~grounds~~ grounds.¹⁹ All that can be shown however with the evidence at hand is that a cyclic grammar is as viable as a linear grammar.²⁰ Another reason, though less cogent, for preferring a cyclic grammar is that most of the study in the generative transformational model has been carried out within its framework.

In a cyclic grammar the rules (i.e. those that are cyclic) apply first to the most deeply embedded S, then to the next higher S, and so on until the highest S in the configuration is processed. The primary motivation for the cyclic principle of rule application requires basically that some rule R_i apply both before and after some other rule R_k . Schematically, in terms of a derivation, this is illustrated in (138).

19. Cyclic and linear grammars are discussed by John P. Kimball in Syntax and Semantics, Vol. I, John P. Kimball (ed.), p. 63 - 80.

20. See John Grinder in "On the Cycle in Syntax" in Syntax and Semantics for the motivation of the notion of the cycle in a grammar. Refer also to foot-note 6 p. 138.

(138) Underlying Structure

Intermediate Structure ₁	by rule R _i
Intermediate Structure ₂	by rule R _k
Intermediate Structure ₃	by rule R _i
⋮	
Surface Structure	by rule R _n

This derivation involves two applications of R_i and a single application of R_k. There is no intermediate string in the derivation which meets the structural description $\bar{\sigma}$ for R_k except the string created by the first application of R_i. After this first application of R_i there is no intermediate string which is properly analysable with respect to R_i except the output string of R_k. What we have then are two applications of R_i which are made possible only if R_k applies between them. The transformational rules which apply in a cycle are partially ordered extrinsically among themselves. For illustration I shall consider the interaction of (a) the passive and object raising rules; (b) the reflexive and subject raising rules; and (c) gender copying and subject raising rules.

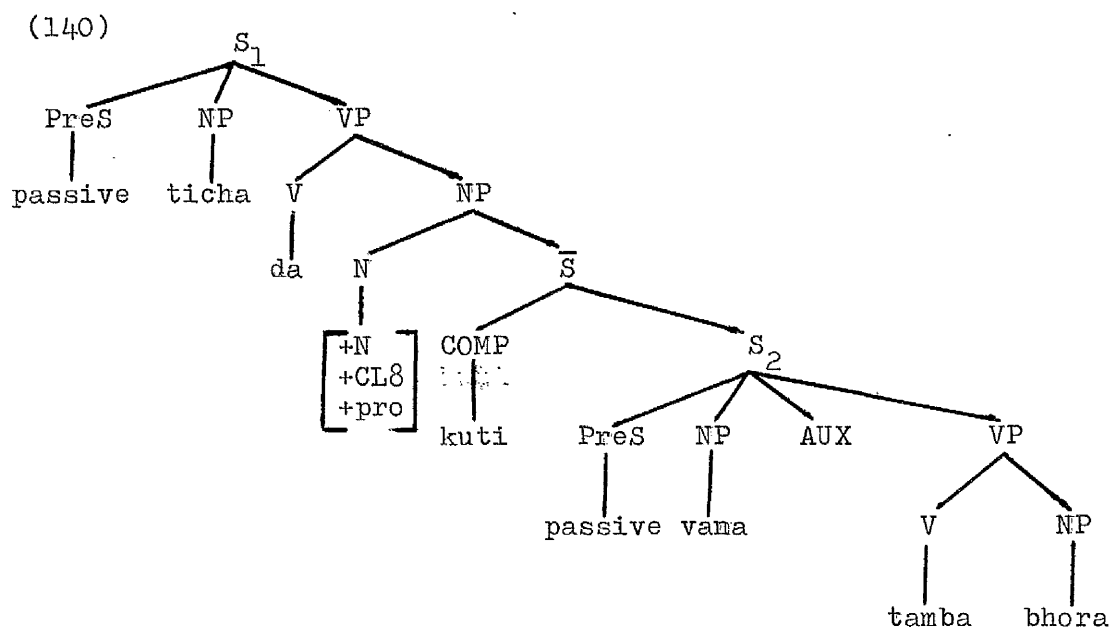
5.18.1 Passive and Object Raising rules

Consider the sentence in (139) and also compare it with (72a).

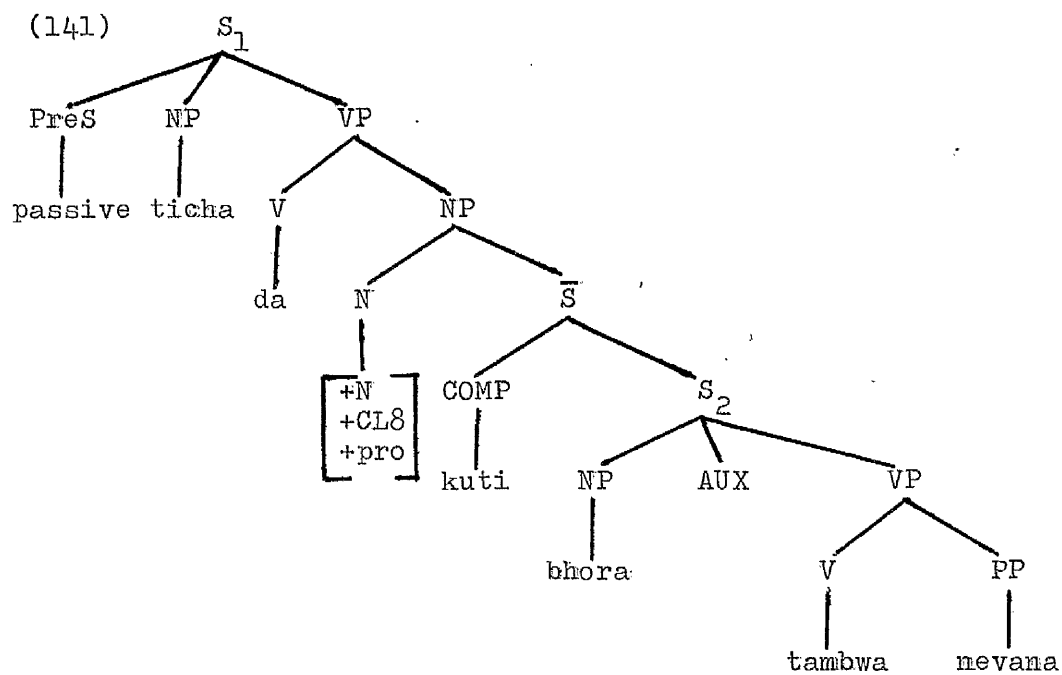
(139) Bhóra rinodiwá natícha kuti ritámbwé névana.

(a ball - is wanted - by the teacher - that - it is played -
by children = The teacher wants the football to be played
by the children.)

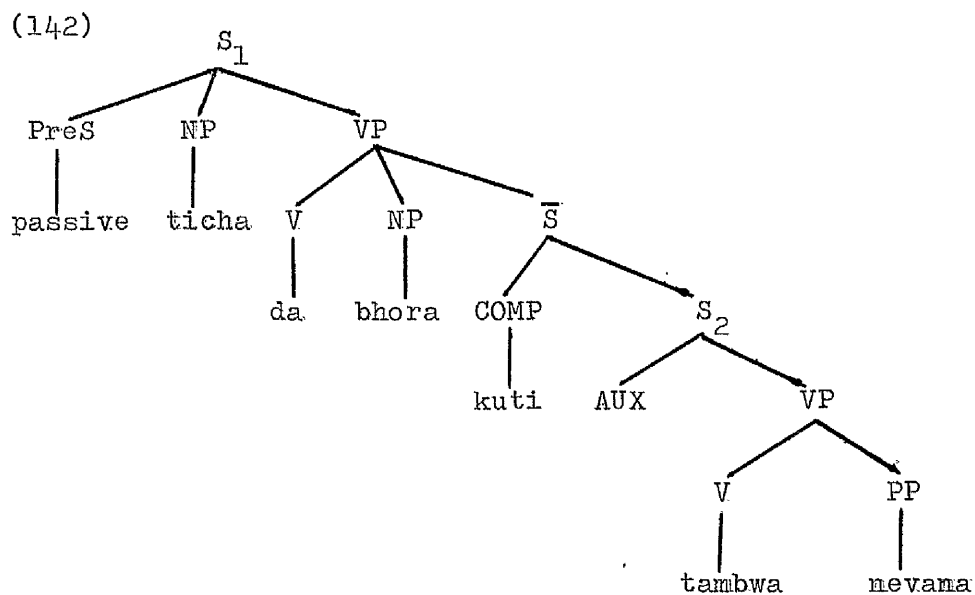
The structure which underlies (139) is provided in (140).



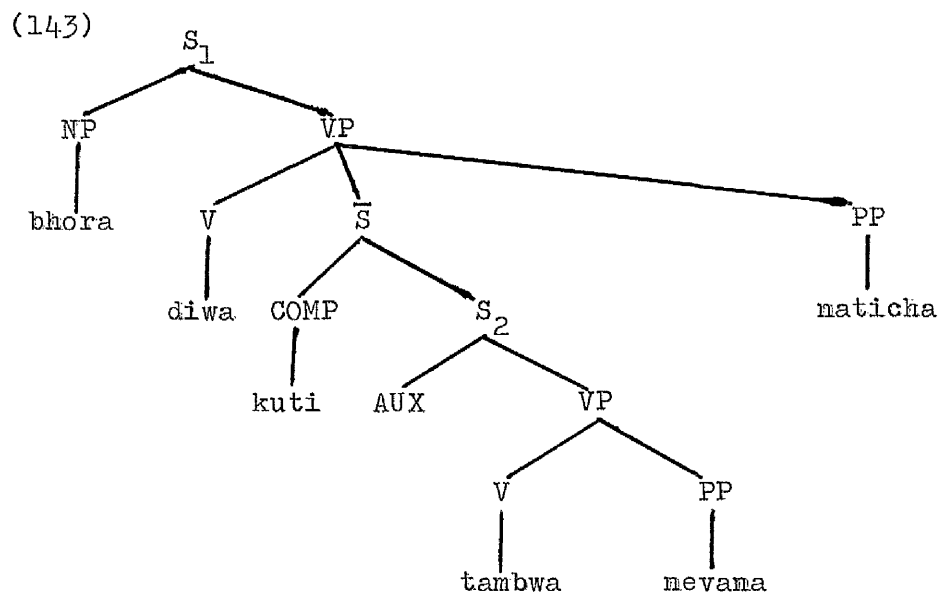
After applying the passive to S_2 we get the structure in (141).



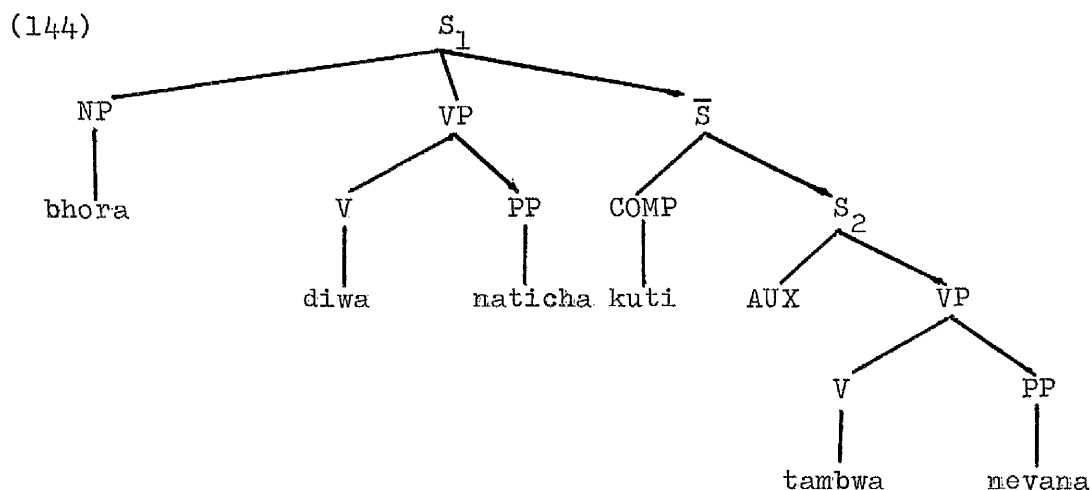
Then object raising applies to give us the tree in (142).



Note that bhora is now a direct object in S_1 . By applying the passive in S_1 the configuration we get is (143).



After extraposition of \bar{S} the result is then (144).

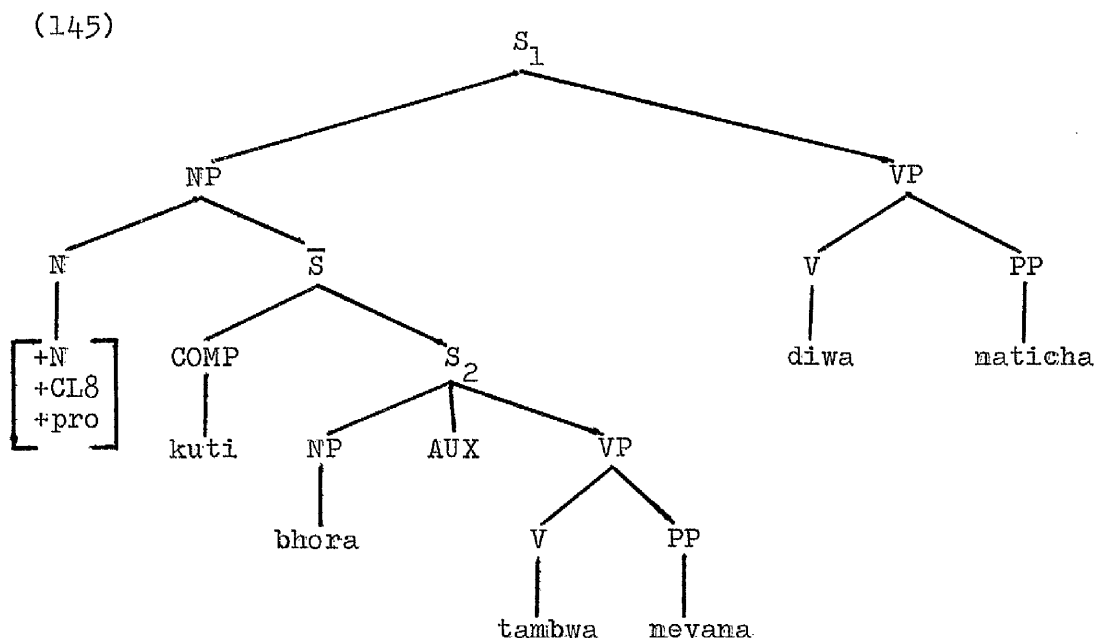


In deriving (139) from (140) first the passive was applied. Its output created the structural description for the object raising rule, the output of which in turn produced a structure which was properly analysable for a second application of the passive rule. The interaction of these two rules describes how the noun phrase bhora which is at the ~~left~~^{right} end of the sentence in (72a) has moved up the tree to be the subject of the topmost S in (139). The interaction of these two rules is quite consistent with the notion of the cycle as described above.

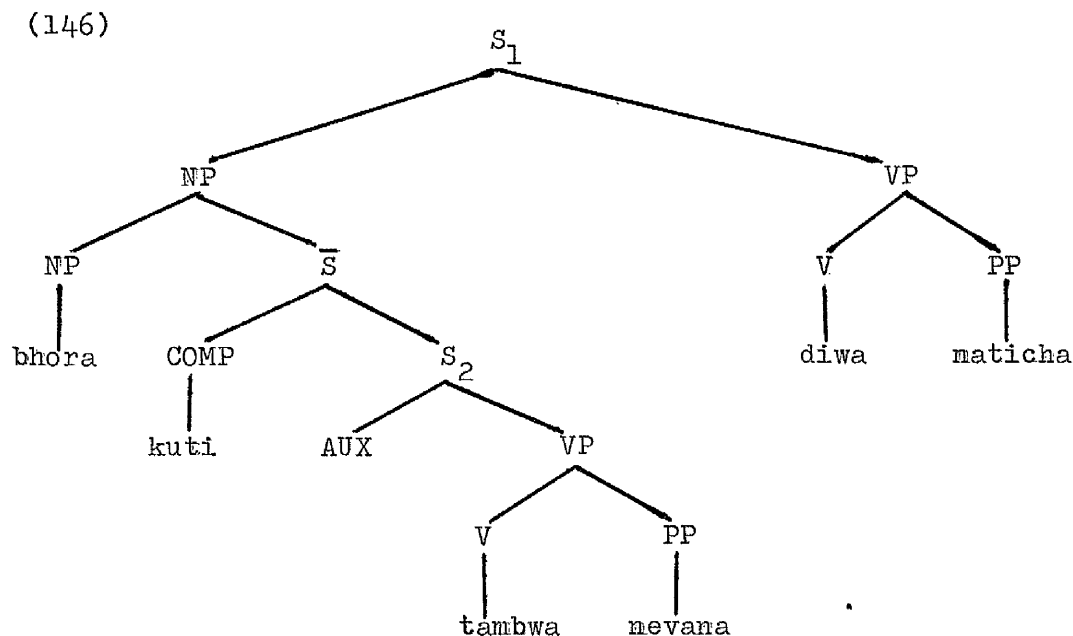
Nevertheless, by adopting the linear grammar approach which dispenses with the notion of cycle we can still derive (139) from (140). Transformational rules are ordered as in a cyclic grammar. According to this approach a transformational rule is applied first to the most deeply embedded S, then to the next higher S which meets its structural description until the highest S is reached. A rule is constrained to apply with an upward orientation in a given configuration. Then the next rule is applied in the same fashion until all the rules relevant to a given structure have been applied.

Now let us see how this works with respect to the structure in (140). I shall assume that the order of application of these rules is passive and then object raising. The first application of the passive (i.e. to S_2) results in the same tree structure as in (141) above. The

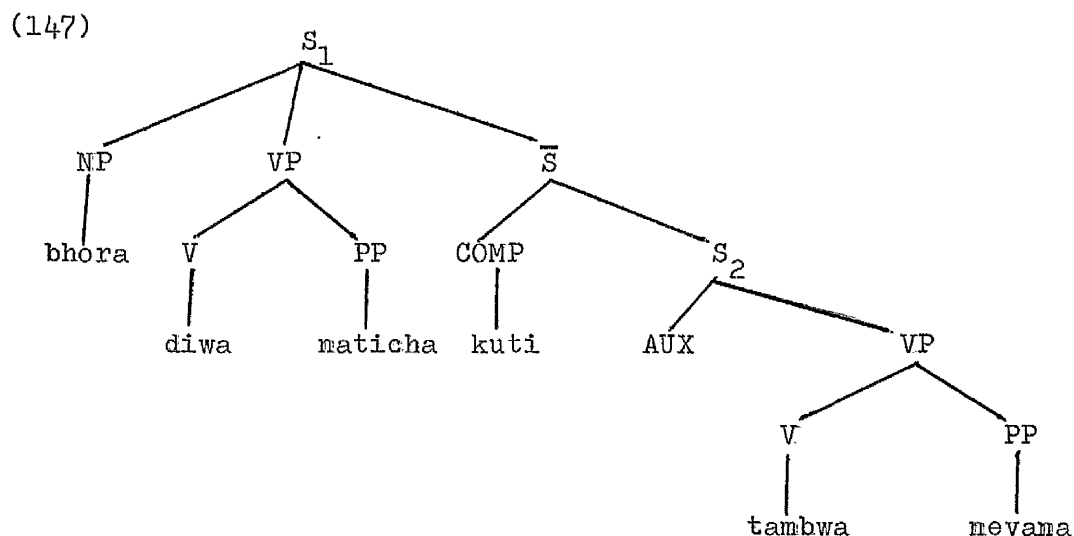
second application of the passive yields the structure in (145).



Allowing for its reformulation (the details of which are not essential here), the rule of object raising is considered next. Its application to the tree above will result in the structure in (146).



Extraposition applies next.



The configuration in (147) is the same as that in (144) from which we said (139) derived. Notice however that the notion of an upward orientation on a structure is independent of the cyclic - non-cyclic principle.

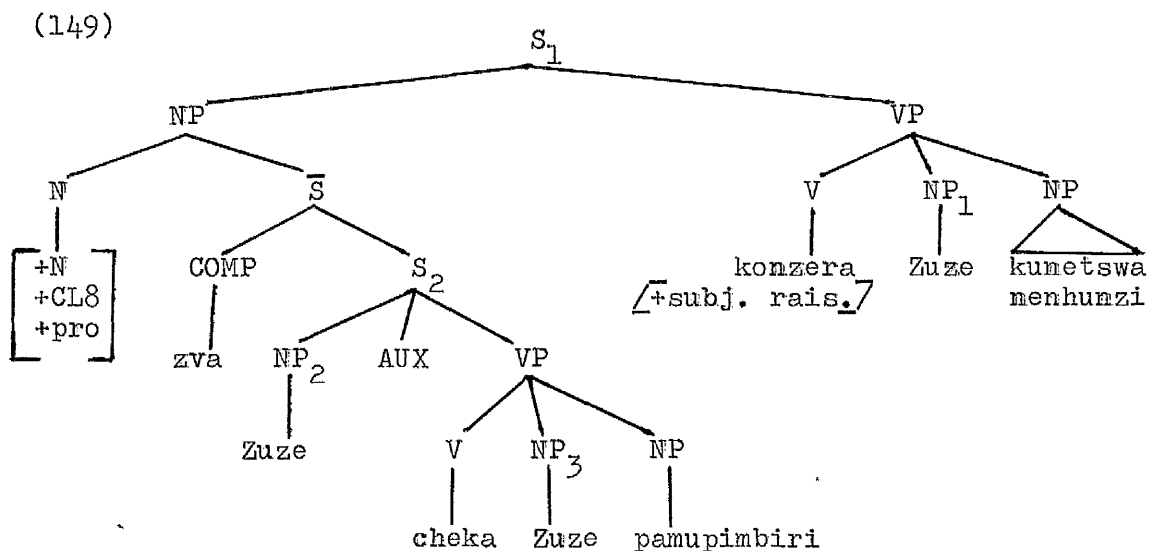
5.18.2 Reflexive and Subject Raising rules

The interaction of the rules of reflexivization and subject raising helps to motivate the notion of the cycle. To this end consider the sentence in (148).

(148) *Zúze zvaázvicheka pamupimbiri ázvikonzera kúnetswa ménhunzi.*

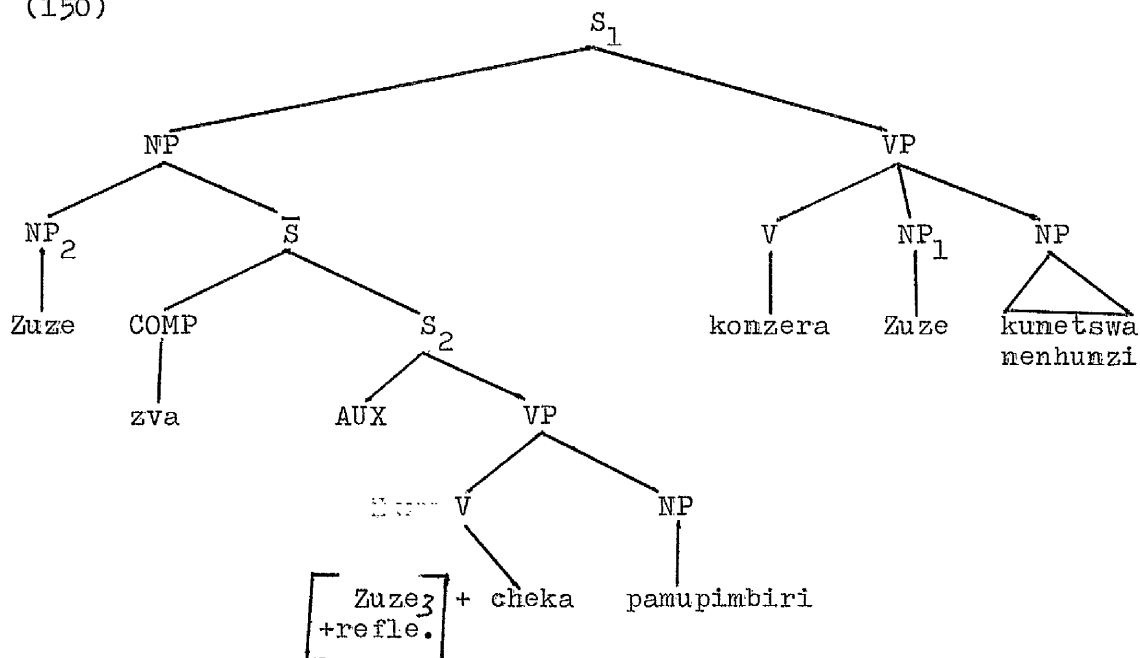
(Zuze, because he cut his shin, has caused himself to be bothered by flies.)

Hereunder is the rough underlying structure of this sentence.



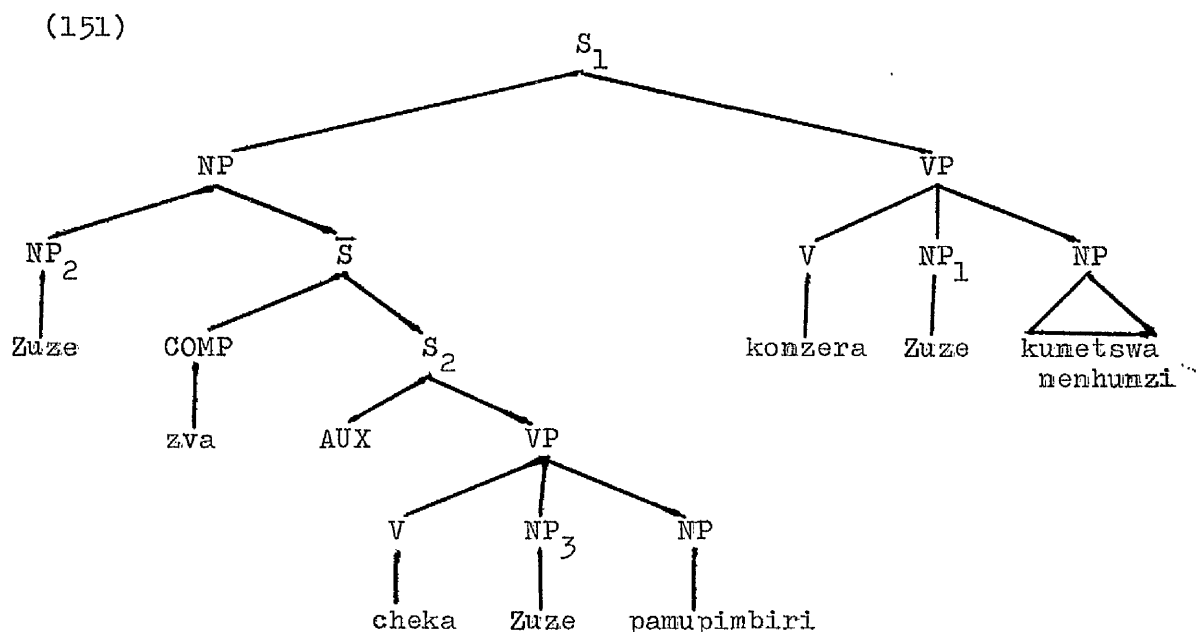
The structure in S_2 is properly analysable for reflexivization. We also notice that the verb -konzera belongs to a class of verbs which allow subject raising to apply on their abstract subject NP. Application of this rule to S_2 yields the result (150).

(150)



Note that after the application of subject raising there are now two occurrences of Zuze in S_1 , which paves the way for a second application of the reflexive rule. Thus the two applications of the reflexive and the one of subject raising which comes in between them strongly support the notion of the cycle as described above.

Adopting the linear grammar and assuming that the order of application of these two rules is reflexive and then subject raising, it will be seen that reflexivization will apply to S_2 only, but not to S_1 . In S_1 its structural description will not be met. So this ordering of these two rules will not help. Possibly in a linear grammar the ordering of these two rules is subject raising and then reflexivization. Applying subject raising first, we obtain the structure in (151).

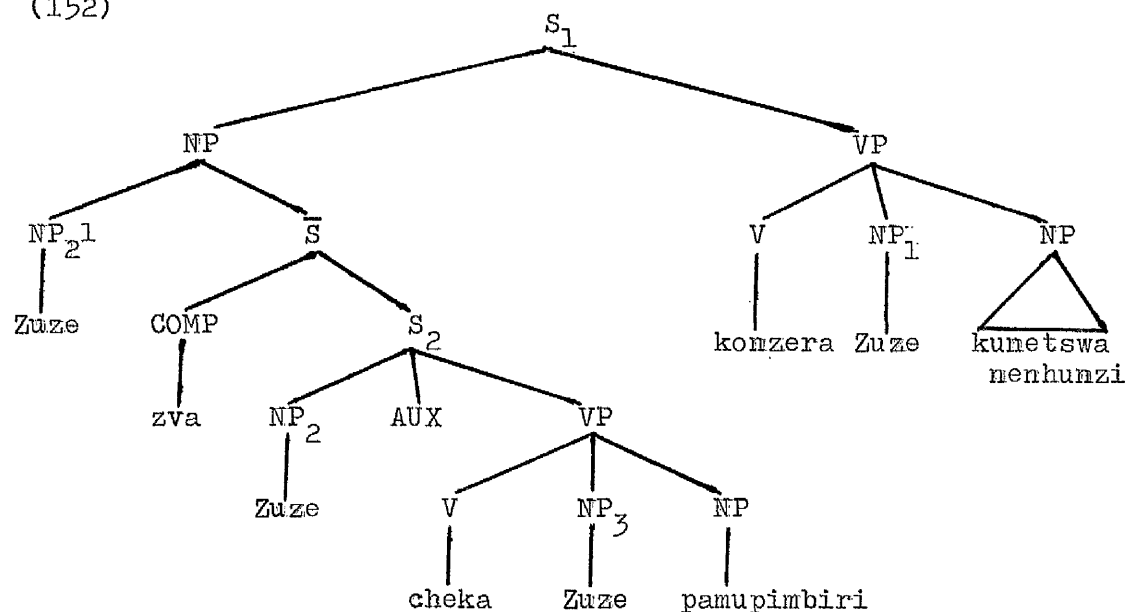


We then apply the reflexive rule. The problem we encounter immediately is that S_2 is no longer properly analysable for the reflexive rule although S_1 now is. This reordering of these two rules does not help us either to derive (148) from (149). From this it may be deduced that a linear grammar is weaker than a cyclic grammar.

Nevertheless, if raising (subject or object) is regarded as a copying rule which copies the subject NP of the embedded clause into the next higher clause, the argument above which is in favour of the cyclic principle, is easily countered. Copying rules are common in a generative transformational grammar (cf. gender copying and object copying). Allowing raising to be a copying rule and assuming the ordering of these rules to be raising and then reflexive, (148) would then be derived in the following manner:

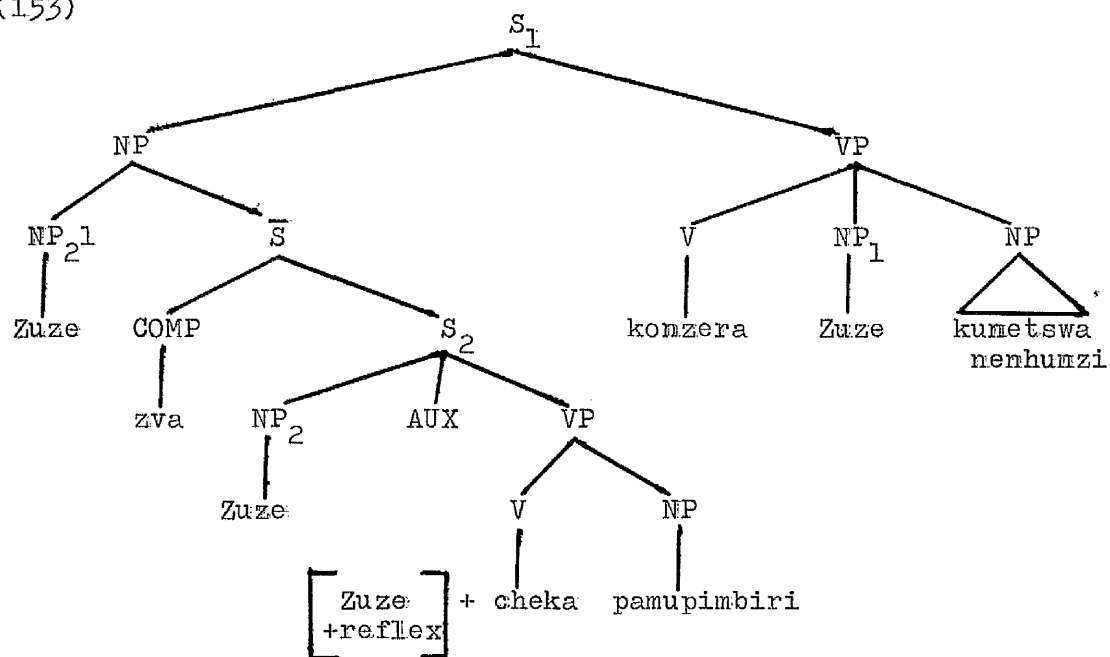
- (a) apply raising to NP_2 by copying that term from S_2 into S_1 .

(152)



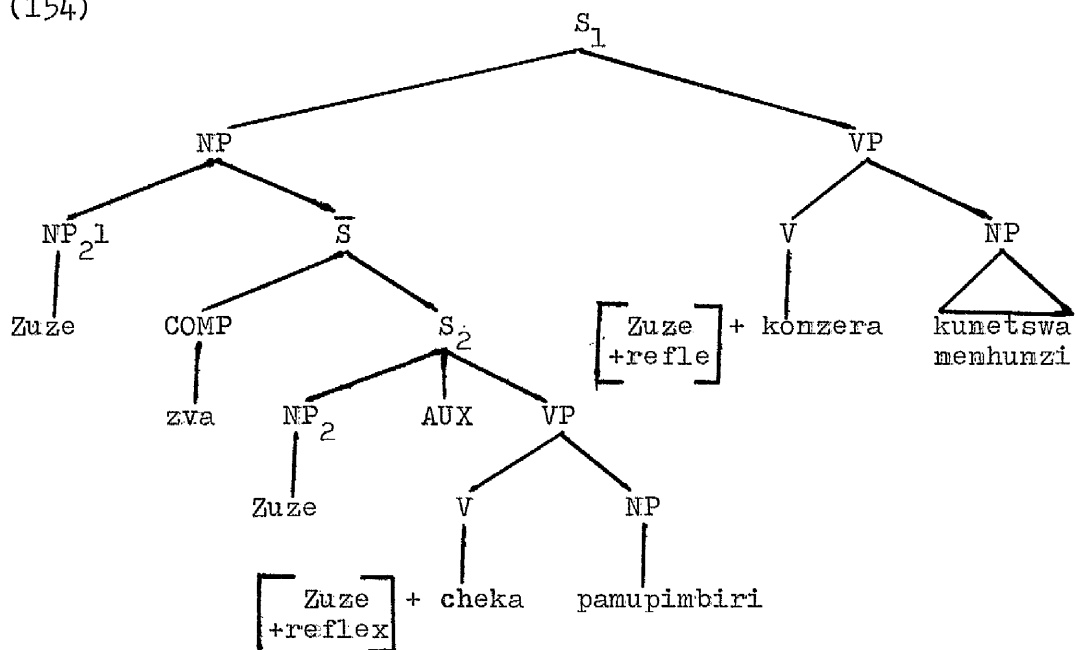
(b) we then apply the reflexive rule to S_2 , marking NP_3 for reduction to the reflexive form.

(153)



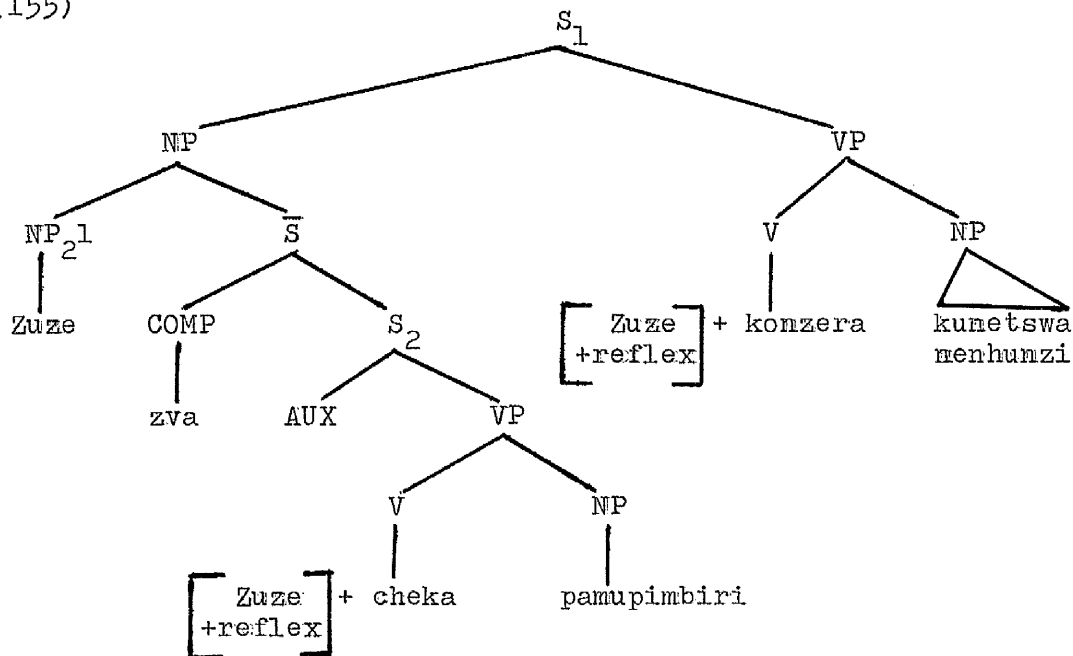
(c) next apply the reflexive rule again, this time marking NP_1 for reduction to the reflexive form.

(154)



The only other rule of concern to us here is Equi-NP deletion which deletes NP₂ from S_2 as in (155).

(155)



In this way sentence (148) is correctly generated. Note that in this derivation there is one application of the rule of raising followed by two applications of the reflexive rule. The latter are contiguous. The application of these rules in this derivation is therefore non-cyclic.

5.18.3 Gender Copying and Subject Raising rules

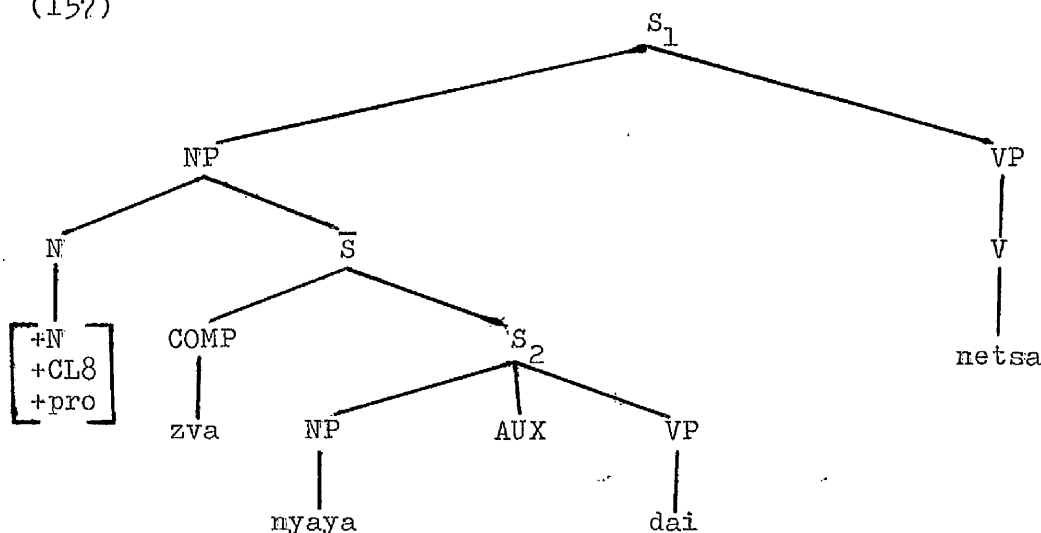
The interaction of these two rules yields similar results. To this end consider and compare the sentences in (156) whose underlying structure appears in (157).

(156)a. Nyaya' zwayádai' zvíchámétsa.

b. Nyaya' zwayádai' íchámétsa.

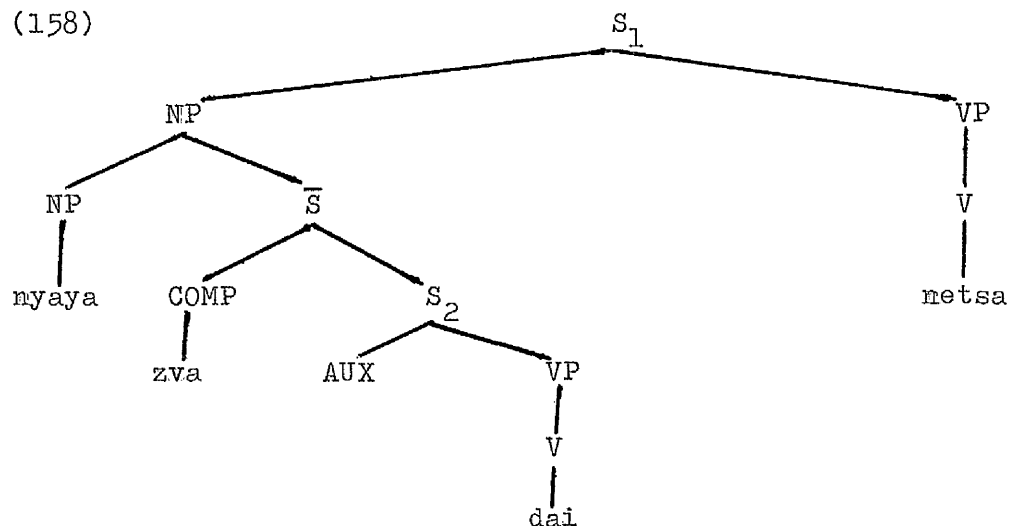
(Since the affair has taken this turn there will be a difficulty.)

(157)



Let us consider the cyclic principle first. Gender copying is applied first to S_2 . This will eventually result in the concord y in zwayádai. Next, since the structural description for subject raising is met, we choose to apply it and the configuration which results is (158).

(158)



The head noun of the subject NP of the higher S is no longer

+N
+CL8
+pro

but nyaya' which has among its features $\overline{+CL9}_7$. Now gender copying is applied, but in the higher S this time. This will eventually result in the concord i in ichanétsa. In this way (156b) is generated. If subject raising had not been applied, but only gender copying, the final result would be (156a). Note that in order to derive (156b) from (157) it is essential that the application of these two rules follow this order: gender copying, subject raising and gender copying. Applying, for instance, subject raising first in the series will leave S_2 without a subject NP, and consequently the rule of gender copying will block.

Now let us consider the linear grammar principle. Let us also first assume that these two rules are ordered this way: gender copying, subject raising. If gender copying is applied to both S_2 and S_1 first and then subject raising after, we finally come up with (159).

(159) Nyaya' zvayádaí' zvéchénétsa.

This sentence by itself is grammatical, but is ungrammatical if considered as having been derived from (157) by two successive applications of gender copying followed by one of subject raising. The drawback is that after applying these rules in this order we end up with a situation in which the raised subject and its new predicate are not in concordial agreement. The grammaticality of (159) is a result, not of subject raising, but of complementizer placement.

Let us now consider the other ordering of these two rules: subject raising, gender copying. Applying subject raising first immediately raises a problem since it leaves S_2 without a subject, and consequently gender copying is effectively blocked in S_2 . However if subject raising is considered as a copying rule as was the case in 5.18.2 above, (156b) can be derived from (157) without difficulty. The order of application of these rules will be: subject raising, gender copying. Subject raising will apply followed by two applications of the gender copying rule.

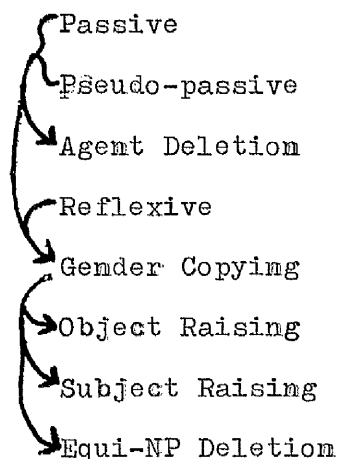
What has been shown in this subsection is that there are at least two different ways of looking at how transformational rules apply to configurations which contain embedded sentences. The privilege which the cyclic principle has enjoyed over the years is after all not unassailable. Judging from the foregoing discussion in this subsection, neither the cyclic principle nor the linear principle is preferred over the other on empirical grounds.

5.18.4 Summary

Apart from establishing that the cyclic principle is no less powerful than the linear principle, the account in 5.18.1 - 3 has shown that some rules are ordered, at least partially, among themselves. Of the rules discussed in this chapter the following have been shown to be cyclic: passive, reflexive, gender copying, object raising and subject raising. Others which appear to be cyclic are: pseudo-passive, agent deletion and Equi-NP deletion. Since the pseudo-passive operates on the same structural description as the simple passive, its cyclic application is obvious enough not to require demonstration. Agent deletion is a rule whose application depends on a previous application of either the passive or the pseudo-passive rule, and since the latter are cyclic, it would appear that it too is cyclic.

The passive, the pseudo-passive and the reflexive rules are mutually exclusive,²¹ while agent deletion will apply only after either of the first two rules ^{has} ~~have~~ applied. Gender copying is ordered after the passive and the pseudo-passive. Object raising, subject raising and Equi-NP deletion can only apply after the gender copying rule, but among themselves they are mutually exclusive. Below is a tentative ordering of these rules within a given cycle.

21. For the occurrence of the passive and pseudo-passive formatives with one and the same verb see foot-note 7 p. 187



The linear ordering within the cycle follows the direction of the arrows. None of the other rules, it would appear, is cyclic. For none of the non-cyclic rules is ordered before any of those that are cyclic. Some of the non-cyclic rules are nonetheless ordered among themselves. For instance, extraposition applies before pro deletion; object[†] copying must apply after either object anaphora or object focussing; however object copying as well as gender copying applies before the noun prefix rule.

6.0 THE GRAMMATICAL FUNCTION OF COMPLEMENT CLAUSES

In Chapter One it was shown that sentences may be embedded in other sentences. These embedded sentences or complement structures are introduced by complementizing morphemes which are listed in subsection 2.10. The occurrence of these complementizing morphemes is specified by the phrase structure rule in (32) in Chapter Four. It was also shown that these complement structures are of two types, namely, those that are dominated by NP (see 1.1.0) and those that are dominated directly by VP (see 1.2.0). In this chapter I would like to show the grammatical function of these complement structures to the extent that this is possible. I shall consider first noun phrase complementation and then verb phrase complementation.

6.1 Noun Phrase Complements

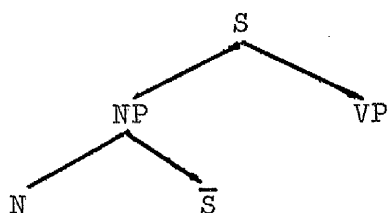
Noun phrase complements, as we saw, are structures with properties which are characterized by the phrase structure rule

$$NP \longrightarrow N(S)$$

which was given in (49d) in Chapter One. These sentential complements may function grammatically as subject and as direct object of verbs. Just as noun phrases may be objects of prepositions in, say, Latin or English, in Shona noun phrases may also be objects of elements like /ik/ and /na/. I shall now illustrate each of these grammatical roles which complement clauses may assume.

6.1.1 Complement structures in subject position

A complement clause in a subject position is represented by the following structure:



Occurring in this position, a complement clause may be introduced by any of the six complementizing morphemes which are listed in 2.10. Hereunder are examples of complement clauses in subject position. The complement clauses in question are underlined.

A. Complement clauses introduced by kuti [+ indicative]

- (1) Kuti umorara zvako kusvika masikati pamba pavatezvara zvinyadza.

(That you sleep until midday at your father-in-law's home is shameful.)

- (2) Kuti Podzorimwa achasvika mangwana zvinondifadza.

(That Podzorimwa will arrive tomorrow pleases me.)

- (3) Zvakaita hazvo kuti Murungweni akabva asvikawo panguva iyoyo.

(lit. It happened by itself that Murungweni arrived at that time = Luckily enough Murungweni arrived at that time.)

Note that in (3) the subject complement clause is extraposed to the end of the sentence.

Complement clauses may also occur as subject in sentences in which the subject concord either does not appear at all or is controlled by a verb complement NP.¹

- (4) Kuti Mwedzi akasvika mezuu kunyepa.

(That Mwedzi arrived yesterday is false.)

- (5) Kuti akarovha basa nokuti airwara hachisi chokwadi.

(That he did not come to work because he was ill is not the truth.)

B. Complement clauses introduced by kuti [+ subjunctive]

- (6) Kuti ndidzokere kudongo kwandakambobva zvapata muhana mangu.

(For me to go back to my former village site won't be acceptable to me.)

- (7) Kuti tipote tichinoona vabereki kumusha zvakanaka chaizvo.

1. For more information in this connection see p.54 - 56.

(For us to go home regularly and see our parents is a good thing.)

- (8) Kuti ambu'ya vanwé tii isina' mukaka zvava' kura'mba.

(For grandmother to drink black tea is now difficult.)

- (9) Kuti Tongai' auye' mangwana zvinongondifadza.

(For Tongai to come tomorrow will still please me.)

The comment made above in (A) with regard to the control of subject concords equally applies to complement clauses introduced by kuti /+ subj./.

- (10) Kuti titize' umbwende.

(For us to run away would be cowardice.)

- (11) Kuti Roda' asvike' pamusha' pababa' wake' iye akambotiza' mukumbo haisi nyore'.

(For Roda to go to her father's home after she had eloped is not an easy matter.)

C. Complement clauses introduced by kana /+ participial/

or kuti /+ participial/

- (12) Kana mombe dzako' dzarara mudoro' make' zvichamusvota' chaizvo.

(If your cows were in his garden the whole night it is going to worry him very much.)

- (13) Kana Tembani' apunza ndiro imwe' chete' hazvina' mhosva.

(If Tembani has broken only one plate it does not matter.)

- (14) Kana Gondo' akarovha' basa kwesvondo rese' zvichamuomera'.

(If Gondo absconded from work the whole week things will be difficult for him.)

- (15) Kuti wakatengera' amai rokwe zvakanaka.

(If you bought your mother a dress it is fine.)

D. Complement clauses introduced by kana /+ consecutive/

- (16) Kana ukaona' chiva chichifamba' zvinoshura.

(If you see a puff-adder in motion it implies ill luck.)

- (17) Kana ukabatwa' muhapwa' zvinonyeredza.

(If some one touches your arm-pit it tickles.)

- (18) Kana mwana akatúká amái váké zvinoera.

(It is shocking for a child to scold his/her mother.)

- (19) Kana ukagara uchidya nyama chete zvinofinha.

(If you eat meat only every day it will get monotonous.)

- (20) Kana ukapóta uchibata-bata tubasa zvinoyamura.

(If you undertake small pieces of work it will help (you).)

The complementizing morpheme kana in the sentences (16) - (20) may be deleted optionally without effecting any semantic change.

- (21) Ukiona chiva chichifamba zvinoshura. (see 16)

- (22) Ukabatwa muhapwa zvinonyeredza. (see 17)

- (23) Mwana akatúká amái zvinoera. (see 18)

- (24) Ukagara uchidya nyama chete zvinofinha. (see 19)

- (25) Ukapóta uchibata-bata tubasa zvinoyamura. (see 20)

- (E) Complement clauses introduced by ku [+ infinitive]

- (26) Kufadza munhu hazvizi nyore.

(To please a person is not easy.)

- (27) Kuona tsuro ichiombira zvinoomesa mate mukwana.

(To see a rabbit clapping is breath-taking. (lit. it dries the saliva in the mouth.))

- (28) Kupopotedzana nevadiki zvinofumura.

(To quarrel with youngsters is degrading.)

- (29) Kunamata bedzi hakuna kukwana.

(Praying alone is not sufficient.)

It is not infrequent for the subject of the complement clause in this case to be deleted. One other observation worth pointing out here is that the sentences in which complement clauses introduced by ku [+ infin.] are subjects tend to express generalizations, and in consequence the complement clauses have indefinite subjects, hence these are usually deleted. In the sentences (26) - (29) the subjects of the complement clauses are deleted. But in (30) and (31) below the subjects are present.

(30) Mwana kutúka amái zvákaiipa.

(For a child to scold its mother is deplorable.)

(31) Mbudzi kudya mufenje hufana nyina.

(For a goat to eat the cabbage-tree shows resemblance to the mother.)

The last example is a proverb. Notice that when an infinitive is turned into a predicate ku sometimes becomes hu.

(F) Complement clauses introduced by zva [+ participial]

(32) Zvawátóra mari yake zvíchakukonzera kútaura.

(Taking his money as you have done will get you into trouble with him (lit. will cause you to speak).)

(33) Feso zvaava kuchovha makasa zvíchamurunzira kubá.

(This gambling for money which Feso is now practising will tempt him to steal.)

(34) Matai zvaapera zvíchandipimza muchikwereti.

(The fact that my tyres are worn out will lead me into debt.)

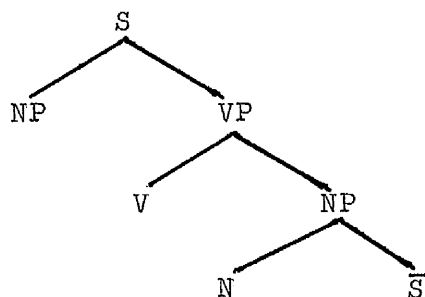
(35) Zvaauya nhasi kudaí zvimoreva kuti basa akapedza.

(Coming today as he has done indicates that he finished the work.)

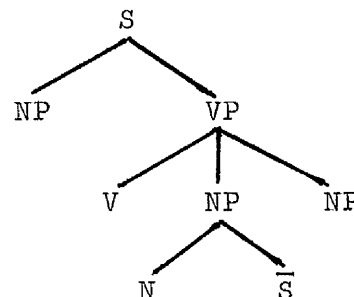
6.1.2 Complement clauses as direct object

In this position in a sentence complement clauses, like non-clausal noun phrases, may occur by themselves or alongside indirect objects. This is illustrated in the tree structures in (a) and (b) respectively below.

(a)



(b)



Indirect objects in Shona are marked by ku/kuna and, to a lesser extent, by pa/pana. In deep structure these indirect objects are considered in this study to occupy a position after the direct object. Note that the occurrence of indirect objects, but not that of direct objects, is optional in such sentences. This is exemplified below where the indirect objects are underlined.

(36)a. Kuda' ákapírá' bhóra kuna' Yoyo.

(Kuda passed the ball to Yoyo.)

b. Kuda' ákapírá' bhóra.

(Kuda passed the ball.)

c. *Kuda' ákapírá' kuna' Yoyo.

(*Kuda passed on to Yoyo.)

(37)a. Ndakwéreta mari' iyi kumukóma' wangu.

(I borrowed this money from my brother.)

b. Ndakwéreta mari' iyi.

(I borrowed this money.)

c. *Ndakwéreta kumukóma' wangu.

(*I borrowed from my brother.)

Generally, the tests for indirect objects are the same as for direct objects which were provided in subsection 1.2.2.

More often than not, however, by an optional transformational rule which I shall refer to as the Indirect Object Movement rule, the indirect object sheds the formative ku/kuna or pa/pana and moves to a position immediately before the direct object as shown in (38) and (39).

(38) Kuda' ákapírá' Yoyo bhóra.

(Kuda passed Yoyo the ball.)

(39) Ndakwéreta mukóma' wangu mari' iyi.

(I borrowed from my brother this money.)

In sentences in which the direct object is a complement clause this indirect object movement rule applies almost always in Shona.

Embedded sentences serving as direct objects may be introduced by kuti [+ indicative], kuti [+ subjunctive], kana [+ participial] or ku [+ infinitive].

6.1.2.1 The sentences in this section contain direct objects, but not indirect objects.

A. Complement clauses introduced by kuti [+ indicative]

(40) J^ok^o ák^af^em^bé^rá k^utⁱ ách^ah^wíⁿa marⁱ kum^ah^achⁱ.

(Joko guessed well that he would win some money on the horse races.)

(41) Sⁱy^as^o ák^ab^vú^ma k^utⁱ ák^at^ad^za.

(Siyaso admitted that he made a mistake.)

(42) T^ak^a áⁿo^daⁱr^a k^utⁱ z^vin^hu z^vé^se z^ví^ch^an^ak^a kum^ush^a.

(Taka believes that everything will be all right at home.)

(43) P^enⁱ á^rá^mb^a k^utⁱ ák^az^vít^aú^ra.

(Peni denied that he said it.)

B. Complement clauses introduced by kuti [+ subjunctive]

(44) R^wí^zi áⁿz^veng^a k^utⁱ á^end^e kú^mom^be.

(Rwizi has got out of looking after the cattle.)

(45) Ch^ur^u ák^aé^dz^a k^utⁱ á^bó^pe móm^be akabva á^túⁿgw^a.

(Churu tried to inspan the oxen and was in consequence gored.)

(46) V^am^at^sa k^utⁱ v^aéⁿd^e m^vú^ra í^satⁱ y^an^ay^a.

(They did well to go before it rained.)

(47) M^ut^ong^wa ák^at^sí^ka-t^sí^ka k^utⁱ á^tá^ur^e chók^wadí.

(The accused was hesitating as to whether or not to tell the truth.)

(48) D^ar^e rák^asúⁿg^a k^utⁱ v^ar^oyⁱ v^at^andír^we m^hí^ri k^waM^asík^andor^o.

(The court ruled that the witch-doctors should be expelled across the Masikandoro river.)

C. Complement clauses introduced by kana [+ participial]

(49) T^et^e v^arⁱ kud^a kuzí^va k^an^a v^an^a v^aú^ya.

(Aunt wants to know whether the children have come.)

- (50) Gogo' ábvunza kana muhári' muchiné' dóro.

(Grandmother has asked whether there is still some beer in the pot.)

- (51) Hamdicháyeuka kana takambósangana kare.

(I don't remember whether we have met before.)

- (52) Marimo' ári' kúedza kufunga kana zvataúrwa namudzviti zvingaitike.

(Marimo is trying to figure out whether what the district commissioner said can be done.)

D. Complement clauses introduced by ku [+ infinitive]

- (53) Mukómaná' ári' kudziídza kutyaira mótokari.

(The boy is learning to drive a car.)

- (54) Chirau' ájaira kunwa' hwahwa' hwepáchena.

(Chirau is used to drinking free beer.)

- (55) Koni' akanónoka kumotóra' vaná kukiréchi.

(Koni was late in going to fetch the children from the creche.)

- (56) Zvakápinda murairidzi muchikóro vaná vakabvá vanyárárá kutaura.

(As soon as the teacher entered into the classroom the children stopped talking.)

E. I have discovered only one example so far of a complement clause in object position which is introduced by kana [+ consecutive].

- (57) Tichaona haázive kana Pesi' akasvikako nhási.

(Tichaona does not know whether Pesi will get there today.)

Even then the status of the complement clause as an object is doubtful since all the tests for object noun phrases, except one, yield results the acceptability of which is questionable.

(a) pseudo-cleft test;

- (58) ?Kana Pesi' akasvikako nhási ndizvo zvaasingáze Tichaona.

(Whether Pesi will get there today is what Tichaona does not know.)

(b) passive test;

(59) ?Kana Pesi' akasvikako nhási hazvizi'vika'mwe naTichaona.

(Whether Pesi will get there today is not known by Tichaona.)

(c) object anaphora test;

(60) ?Tichaona haazvizi'ive. (i.e. kana Pesi' akasvikako nhási)

(Tichaona does not know it. (i.e. whether Pesi will get there today.))

But the interrogative pro-form test produces a positive result.

(61) Tichaona haazive' chii? (reply: kana Pesi' akasvikako nhási)

(Tichaona does not know what? (reply: whether Pesi will get there today))

The fact that the complement clause in (57) is unclear, coupled with the paucity of examples, tends to suggest that complement clauses which are introduced by kana [+consecutive] do not feature as direct objects.

No example was attested of a complement clause introduced by zva [+participial] in direct object position.

6.1.2.2 Examples of sentences with both direct and indirect objects

A. Complement clauses introduced by kuti [+indicative]

(62) Ndaudza Sara' kuti Taka' akauya.

(I told Sara that Taka had come.)

(63) Ticha' akanyevera Matenzeni' kuti akapasa.

(The teacher hinted to Matenzeni that she had passed.)

(64) Posani' abvunza Charwe' kuti mukoma' wake' anodzoka rinhi.

(Posani asked Charwe when her elder sister would return.)

(65) Baba' vakaraira sekuru' kuti amai' vari' kurwara.

(Father sent word through uncle that mother was ill.)

B. Complement clauses introduced by kuti [+subjunctive]

(66) VaChiutsi' vaidá kumamiki'dza mwana' kuti aite' kosi yaasingade.

(Mr. Chiutsi wanted to force his child to take a course which she did not want.)

- (67) Amái vákatsíndidzá mwanásikana wávo kúti ásataúire munhu zvechikomba chávó.

(The mother entreated her daughter not to tell anyone about her (mother's) boy-friend.)

- (68) Mubátwa ákaráira mumwe mukómana kúti vabereki váké váuyé kúzomutsikinura.

(The accused sent word to his parents through a certain young man to the effect that they should come to bail him out.)

C. Complement clauses introduced by kana [+ participial]

These have been difficult to come by.

- (69) Toni' ábvunza Sekesai' kana Chipó' ádzoka.

(Toni enquired from Sekesai whether Chipó was back.)

- (70) Ndichakuyéúchidza kana ngúvá yékudya yásvika.

(I shall remind you when it is meal time.)

D. Complement clauses introduced by ku [+ infinitive]

- (71) VaGondo' vakamanikidza Toko' kuroorwa nemukómana waakanga ási-ngade.

(Mr. Gondo forced Toko to get married to a boy she did not love.)

- (72) Tete' átuma Magi' kunotóra badza kumunda.

(Aunt sent Maggie to go and fetch a hoe from the field.)

- (73) Mari' ákabátsirá Nyika' kutakura mbatya dzaké.

(Mari assisted Nyika to transport his goods.)

- (74) Rega' kufurírá mwaná kuba.

(Do not lead the child into stealing.)

- (75) Musíkana' uye ákakónzera Zúze kurohwa nemátsotsi.

(That girl caused Zuze to be beaten up by hooligans.)

6.1.3 Complement Clauses as object of /ir/

In Shona almost every verb may be accompanied by a phrase of the type marked by the element /ir/. (For this type of phrase see also Appendix A.) This phrase occurs immediately after the verb in (76),

immediately after the direct object in (77), and immediately after the second object in (78). The /ir/ phrases are underlined in these sentences.

(76) Jesi' auyira mari' yake.

(Jesi has come for her money.)

(77) Makoni atyorera rura yaSani nharo.

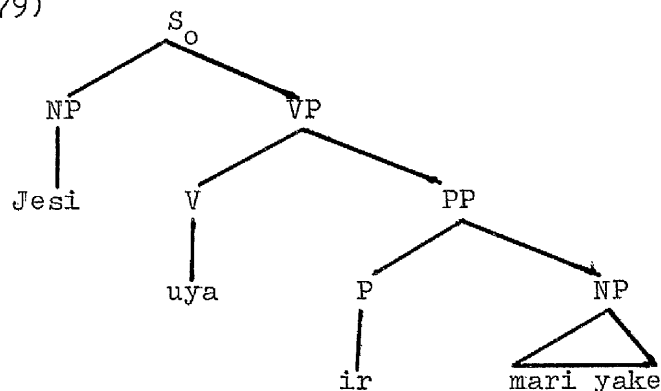
(Makoni broke Sani's ruler out of sheer cantankerousness.)

(78) Sara' anyimira vana' chékudya' misikanzwa yavo.

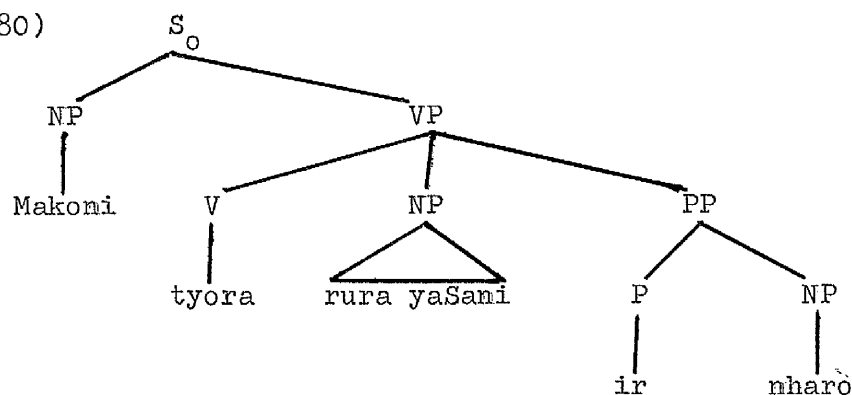
(Sara refused to give the children any food because of their mischief.)

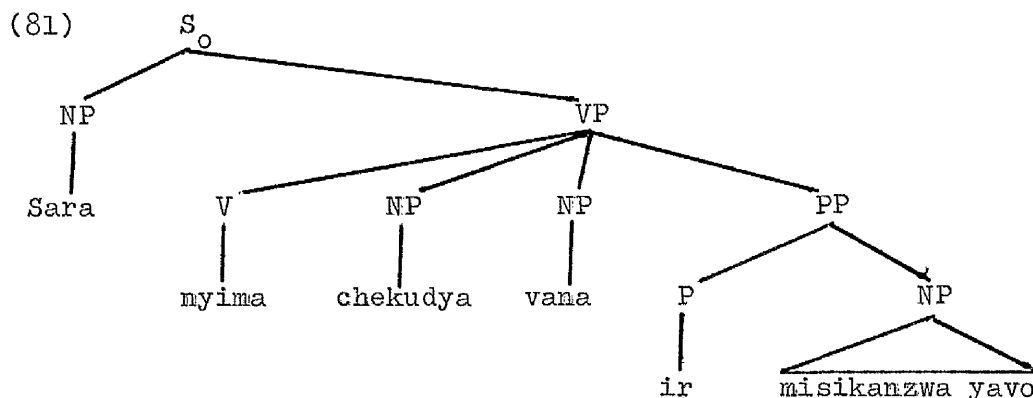
The rough deep structures of these three sentences are given in (79) - (81) respectively.

(79)



(80)





In all these three structures the Applied transformational rule will then insert obligatorily /ir/ before the terminal vowel of the verb to give us the verbs -uyirá, -tyorérá and -nyimírá. The morpheme /ir/ is distributed in accordance with the rules of vowel harmony in Bantu languages. That is, /ir/ occurs if the penultimate vowel of the verb stem, simple or extended, is /i, a, u/, and /er/ occurs if the penultimate vowel is /e, o/.

These purposive phrases, as I propose to call the phrases which are marked by /ir/, may express purpose or the reason for which the action (or state) of the verb is accomplished (or entered into) as in (76) - (78). This type of phrase may also signify the person or thing for which the action (or state) of the verb is done (or entered into) as in (82) - (84).

(82) Ndaténgera Rumbidzai bhóra iri.

(I bought this ball for Rumbidzai.)

(83) Kugara pánó zvákánákira iwe, kwéte ini.

(For us to stay here is all right for you, not for me.)

(84) Waipisira shamwari yakó nyaya yaké.

(You have spoiled your friend's case for him.)

When the /ir/ phrase has this connotation it is necessarily moved from its position to a position immediately after the verb as in (82) - (84). In view of this difference in connotation, perhaps the two occurrences

of /ir/ should not be equated.

The tests for a noun phrase which is object of /ir/ are the same as for direct objects which were outlined in subsection 1.2.2. Taking (85) as an illustration, it can be shown that kuroya is a noun phrase object of /ir/.

(85) Tarúvinga ákárám^ábíra mukádzí kúroya.

(Taruvinga divorced his wife because of her witchcraft.)

(a) pseudo-cleft;

Kuroya ndíko kwaákárám^ábíra mukádzí Tarúvinga.

(It was witchcraft which made Taruvinga divorce his wife.)

(b) passive;

Kuroya kwákárám^ábí^rwa mukádzí naTarúvinga.

(witchcraft - was divorced for - a woman - by Taruvinga =
Taruvinga's wife was divorced by him because of witchcraft.)

(c) interrogative pro-form;

Tarúvinga ákárám^ábíra mukádzí chíí? (reply: kuroya)

(Why did Taruvinga divorce his wife? (reply: because of witchcraft))

(d) object anaphora;

Tarúvinga ákazvirám^ábíra mukádzí. (i.e. kuroya)

(Taruvinga divorced his wife because of that. (i.e. witchcraft))

Since one cannot perform an action on behalf of or to the advantage or detriment of an object noun phrase of the type (N + S), noun phrase complement clauses will not be found in /ir/ phrases with the latter connotation. It is therefore with the former connotative expression of the /ir/ phrases that we shall be concerned here. The noun phrase complement clauses which have the privilege of occurring in these /ir/ phrases are mainly those introduced by kuti [+subjunctive] and ku [+infinitive].

A. Complement clauses introduced by kuti [+subjunctive]

(86) Vamwe vakaénda kumunda, así Tokó akasí^árira kúti áchengete ambúya

vairwára.

(The rest of the family went to the field, but Toko remained behind in order to look after grandmother who was ill.)

(87) Babá vakárimira pízi kuti vaténgésé.

(Father grew the peas in order to sell.)

(88) Vamwe varúmé vānoróórera vakadzí vazhínjǐ kuti vāwané vānóva-batsíra bása chéte.

(Some men marry many wives just in order to get people to help them do their work.)

(89) Jókó áidá kúkandira VāMhésvu chibhakera kuti vápóre kúvhaira kwaváiiita.

(Joko wanted to give Mr.Mhesvu a blow in order to stop him boasting.)

The /ir/ phrase occurs immediately after the verb in (86); after the direct object in (87) and (88); and after the second object in (89).

B. Complement clauses introduced by ku [+ infinitive]

(90) Vaná vāmirira kunzi chíendai natícha.

(The children are waiting for a word from the teacher to the effect that they may now go.)

(91) Rení naFombo' vānofárirá kudya myáma yéhuku.

(Reni and Fombo feel happy when they are having chicken.)

(92) Mvúrá irí kúpenyera kuzorára ichínáyá.

(There is so much lightning that it will rain during the night.)

(93) Murairidzi ákatándira mwaná kúrovha chikóro.

(The teacher expelled the child because of his/her irregular attendance.)

(94) Posani ákarátidzira ambúya musíkana wáké kusvótésá Rozi.

(Posani introduced his girl-friend to his grandmother in order to annoy Rose.)

As above, the /ir/ phrase occurs immediately after the verb in (90) -

(92); after the direct object in (93); and after the second object in (94).

C. A few examples have been attested also in which the complement clause is introduced by kuti [$\bar{+}$ indicative].

(95) Feso ndakamuro'véra' kuti amotuka' vakuru.

(I beat up Feso because of being rude to his elders.)

(96) Zuze ndakamuzvondéra kuti haadi' kuténgawo hwahwa' kana tiri kubhawa.

(I detest Zuze for his reluctance to buy beer when we are at the beer hall.)

I have not found examples of /ir/ phrases in which the complement clauses are introduced by either kana [$\bar{+}$ participial], or kana [$\bar{+}$ consecutive], or zva [$\bar{+}$ participial].

The /ir/ in these phrases is not infrequently deleted optionally. In the examples which follow /ir/ is deleted.

(97) Vamwe vakaénda kumunda asi' Tokó akasára kuti áchengéte ambúya vairwára. (see 86)

(98) Baba' vakarima pizi kuti vaténgése. (see 87)

(99) Vamwe varume' vanoroóra vakadzi' vazhinji kuti vawane' vanova-batsira' basa chéte. (see 88)

(100) Jókó áida' kukanda VaMhésvu chibhakera kuti vapore' kuvhaira kwavaiita. (see 89)

(101) Posani' akaratidza ambuya musikana' wake' kusvotésa' Rozi. (see 94)

But applied to (85), (90) and (93) this deletion transformation produces negative results as shown by the ungrammaticality of (102) - (104).

(102) *Taruvinga' akaramba mukadzi' kuroya.

(103) *Vana' vakamira' kunzi chiendai' naticha.

(104) *Murairidzi' akatanda' mwana' kurovha chikoro.

In some cases the sentences in which /ir/ appears are less acceptable than those from which it is deleted. The (a) sentences in the pairs below are less acceptable than the (b) sentences.

(105)a. Murwéré akabúdirá panzé kúti afurwé nemhepo.

b. Murwéré akabúda panzé kúti afurwé nemhepo.

(The patient went out of the house in order to get some fresh air.)

(106)a. Sani' ari' kudýirá nyáma kúti akoré.

b. Sani' ari' kudya' nyáma kúti akoré.

(Sani is eating meat in order to gain weight.)

(107)a. Mutyairi akacheúkíra kúti aomé kana mapúrisa áitevera íye.

b. Mutyairi akacheúká kúti aomé kana mapúrisa áitevera íye.

(The driver looked back in order to see whether the police were trailing him.)

Further investigation is needed here in order to ascertain more precisely when this deletion transformation applies and when it does not.

That /ir/ has been deleted in (97) - (101) and also in (105b), (106b) and (107b) receives further confirmation from the pseudo-cleft test. I shall illustrate this point using the sentences in (97), (99) and (101). The (b) sentences are ungrammatical because /ir/ does not appear.

(108)a. Vamwe vakaénda kumunda así Tokó, kúti áchengéte ambúya,
ndízvo zvaakasáirá.

(lit. The rest of the family went to the field but Toko in order that she might look after the grandmother is why she remained behind = The rest of the family went to the field but Toko remained behind in order to look after the grandmother.)

b. *Vamwe vakaénda kumunda así Tokó, kúti áchengéte ambúya,
ndízvo zvaakasára.

(109)a. Vamwe varumé, kúti vawané vanóvabátsíra bása chéte, ndízvo
zvavanoróórera vakadzi vazhinji.

(lit. Some men in order that they may get people to

help them in doing their work that is the reason why they
 marry many wives = Some men marry many wives in order that
 they may get people to help them do their work.)

- b. *Vamwe varúmé, kuti vawané vanóvabátsírá bása chéte, ndízvo
 zvavámoróorá vakádzi vazhínji.

(110)a. Posani, kusvótesá Rozi, ndiko kwaakaratídzira ambúya
 musikama wake.

(lit. Posani, in order that he might annoy Rose, that was
 the reason why he showed his grandmother his girl-friend
 = Posani showed his grandmother his girl-friend in order
 to annoy Rose.)

- b. *Posani, kusvótesá Rozi, ndiko kwaakaratídza ambúya musi-
 kana wake.

In the sentences immediately above the concord zvo in ndízvo is clearly
 a reflex of the noun prefix of class 8, indicating that these clauses
 which are underlined have a noun of class 8 as their head noun. That
 there are /ir/ phrases in (97), (99) and (101) is shown by the presence
 of /ir/ in zvaakasáirá in (108a), /er/ in zvavámoróórera in (109a) and
 /ir/ in kwaakaratídzira in (110a). The pseudo-cleft transformation is
 very reliable for discovering prepositional phrases with deleted prepo-
 sitions in Shoma.

Another test which will confirm the strings underlined in (97)
 - (101) as well as those in (105b), (106b) and (107b) as prepositional
 phrases with /ir/ deleted is the interrogative pro-form transformation.
 In order to elicit as answers the strings which are underlined, /ir/
 must be present in the questions being asked. I shall take (98), (100),
 (105b), (106b) and (107b) for illustration. As above the (b) questions
 are ungrammatical because /ir/ is absent.

- (111)a. Babá vakarímira chii pízi? (reply: kuti vaténgesé)

(Why did father grow the peas? (reply: in order to sell))

- b. *Babá vakaríma pízi chii?

- (112)a. Jóko áidá kúkamdira VáMhésvu chibhakera chii? (reply: kuti vápóre kuvhaira kwaváita)

(Why did Joko want to give Mr.Mhesvu a blow? (reply: in order to stop him boasting))

- b. *Jóko áidá kúkanda VáMhésvu chibhakera chii?

- (113)a. Murwéré ákabúdira panzé chii? (reply: kuti áfurwé némhepo)

(Why did the patient go out of the house? (reply: in order to get some fresh air))

- b. *Murwéré ákabúda panzé chii?

- (114)a. Sani' ári' kudyírá nyáma chii? (reply: kuti ákore)

(Why is Sani eating meat? (reply: so that he may put on weight))

- b. *Sani' ári' kudya' nyáma chii?

- (115)a. Mutyairi ákacheúkíra chii? (reply: kuti áoné kana mapúrisa áitevera iye)

(Why did the driver look back? (reply: in order to see whether the police were trailing him))

- b. *Mutyairi ákacheúka chii?

Notice that these purposive objects may also occur after other complement structures.

- (116) Rwizi' ánzvenga kuenda kumunda kuti agóswera ári kutaundishipi.

(Rwizi avoided going to the field so that he might then spend the day at the township.)

That the strings kuenda kumunda and kuti agóswera ári kutaundishipi are direct object and purposive object respectively is confirmed by the tests for object noun phrases.

(a) pseudo-cleft;

- (117)a. Rwizi' kuenda kumunda ndíko kwaánzvenga kuti agóswera ári kutaundishipi.

(To go to the field is what Rwizi avoided so that he might

then spend the day at the township.)

- b. Kuti agóswera ári kutaundishipi ndí^ízvo zvaánzvéngera^á kúenda kumunda Rwizi^í.

(That he might spend the day at the township is the reason why Rwizi avoided going to the field.)

(b) pseudo-cleft and passive combined;

- (118)a. Kuenda kumunda ndíko kwanzvéngwa^á naRwizi^í kuti agóswera ári kutaundishipi.

(Going to the field is what has been avoided by Rwizi so that he might then spend the day at the township.)

- b. Kuti agóswera ári kutaundishipi ndí^ízvo zvanzvéngerwa^á kúenda kumunda naRwizi^í.

(lit. That he might spend the day at the township it is it what was avoided for to go to the field by Rwizi = 'That he might spend the day at the township is the reason why Rwizi avoided going to the field.)

(c) interrogative pro-form;

- (119)a. Rwizi^í ánzvenga chii kúti agóswera ári kutaundishipi? (reply: kuenda kumunda)

(Rwizi avoided what in order that he might then spend the day at the township? (reply: going to the field))

- b. Rwizi^í ánzvengerei^í kúenda kumunda? (reply: kuti agóswera ári kutaundishipi)

(Why did Rwizi avoid going to the field? (reply: in order that he might then spend the day at the township))

Further examples of sentences like the one in (116) appear below.

- (120) Ákárégera kunwa hwahwa^á kuti áchengétedze mari.

(He stopped beer drinking in order to save money.)

- (121) Ndakábatsira Mashiri kudyára mbeú dzáké kuti iye agozondíba-tsirawo.

(I helped Mashiri to plant his seeds in order that he might help me in turn.)

(122) Magi' ákáróvha kuenda kuchikóro kuti agómoóná bháisikopo.

(Maggie absented herself from school in order to go to the cinema.)

6.1.4 Complement Clauses as Object of /na/ (i.e. instrumental phrases)

Like purposive objects, instrumental objects occur in the form of prepositional phrases. Whereas the preposition was /ir/ in purposive phrases, with instrumental phrases it is /na/. For noun phrases which are objects of /na/ only two of the tests for object noun phrases as outlined in 1.2.2 are applicable. These two tests are the pseudo-cleft and the interrogative pro-form. For illustration consider the sentence in (123).

(123) Tembéní ánéta nekúti áuya ádzókera.

(Tembeni is tired with this coming and going.)

(a) pseudo-cleft;

Kuti áuya ádzókera ndízvo zvaameta názvo Tembéní.

(This coming and going is what Tembeni is tired with.)

(b) interrogative pro-form;

Tembéní ánéta nechii? (reply: nekúti áuya ádzókera)

(Tembeni is tired with what? (reply: with this coming and going))

Note that in the case of the pseudo-cleft transformation, as the object noun phrase of /na/ is moved to the beginning of the sentence, it leaves behind a pro-form. In the case at hand the pro-form is zvo.

Only complement structures introduced by kuti [+indicative], kuti [+subjunctive] and ku [+infinitive] have been attested in instrumental phrases. These phrases indicate the instrument by which the action (or state) of the verb in the containing sentence is accomplished

(or entered into). In the sentences below the instrumental phrases are underlined.

A. Instrumental clauses introduced by kuti [+ indicative]

(124) Sekúru váchafára nekúti wauya.

(Uncle will feel happy that you have come.)

(125) Mónica ári kúyaura nekúti ákatúkwá naJo.

(Mónica is upset at Jo's having scolded her.)

(126) Chipó áizvirumbidza nekúti anogona muchikoro asi ákazokúndi-
kana.

(Chipó used to indulge in self praise saying that she was
bright in class but she finally failed.)

B. Instrumental clauses introduced by kuti [+ subjunctive]

(127) Ndime úrombo nekúti úsvike panó nhási pásimá chékubátá.

(I regret it very much that you have come ^{here} today when I have
nothing to eat.)

(128) Ambúya vánofára nekúti ndiéndé ndinoóná munún'una kujéri
kwaari.

(Grandmother is happy for me to go and visit my young cousin
in prison where he is.)

C. Instrumental clauses introduced by ku [+ infinitive]

(129) Mazúva atátámira múGota momba dzakapéra nekufá.

(When we moved into Gota area many cattle died.)

(130) Jemeti anéta nekukuya.

a. (Jemeti is tired because of grinding.) or

b. (Jemeti is fed up with grinding.)

(131) Vana vakarása mómbe nekutamba.

(The children lost track of the cattle through playing.)

(132) Kunyange zvairambidzwa Dehwe ákapá vapamduki zvókudya nekutyá.

(Although it was unlawful Dehwe gave the outlaws some food
through fear.)

In some cases /na/ can be left out readily without prejudice to the meaning of the sentences as in the sentences below.

(133) Tembēni anēta kuti auya adzókera. (see 123)

(134) Sekúru vachafára kuti wauya. (see 124)

(135) Ndine úrombó kuti úsviké pánó nhási pásina chékubátá. (see 127)

(136) Mazúvá atátamirá muGota mombe dzakapérá kufá. (see 129)

(137)a. Romi' akápára mhaká mékurová mupúrisa.

b. Romi' akápára mhaká kurová mupúrisa.

(Romi committed a crime by assaulting a policeman.)

(138)a. Murúmé akákahadzika mékuóná mbátya dzaké dzábiwa.

b. Murúmé akákahadzika kuóná mbátya dzaké dzábiwa.

(The man was struck dumb to find his property stolen.)

That the strings kuti auya adzókera in (133), kuti wauya in (134), kuti úsviké pánó nhási pásina chékubátá in (135), kufá in (136), kurová mupúrisa in (137b) and kuóná mbátya dzaké dzábiwa in (138b) are /na/ phrases from which /na/ has been deleted is further confirmed by the pseudo-cleft and the interrogative pro-form tests. For illustration I shall consider (133) - (135) only.

(a) pseudo-cleft;

(139) Kuti auya adzókera ndízvo zvaaneta názvo Tembēni.

(Coming and going is what Tembēni is tired with.)

(140) Kuti wauya ndízvo zvavachafára názvo sekúru.

(That you have come is what uncle will be happy about.)

(141) Kuti úsviké pánó nhási pásina chékubátá ndízvo zvandine úrombó názvo.

(That you have come here today when I have nothing to eat is what I regret very much.)

(b) interrogative pro-form;

(142)a. Tembēni anēta néchii? (reply: kuti auya adzókera)

(Tembēni is tired with what? (reply: of coming and going))

b. *Tembéni áméta chii'

(143)a. Sekúru váchafára néchii' (reply: kuti waúya)

(What will please uncle? (reply: that you have come))

b. *Sekúru váchafára chii'

(144)a. Une úrombó néchii' (reply: kuti úsviké pánó nhási pásiná chékubátá)

(What are you sorry for? (reply: that you have come here today when I have nothing to eat))

b. *Une úrombó chii'

In other cases this deletion transformation will be blocked. Applied to (131), (132) and (147a) it results in the ungrammatical sentences in (145), (146) and (147b) respectively.

(145) *Vaná vakarása mómbe kutamba.

(146) *Kunyangé zváirambidzwa Dehwe ákapá vápanduki zvókudya kutya.

(147)a. Aoma shumba ákadónhedza pfúmo nekudedera.

(On seeing the lion he dropped the spear because of trembling.)

b. *Aoma shumba ákadónhedza pfúmo kudedera.

In the examples which follow the (b) sentences in which /na/ has been deleted are preferred to the (a) sentences in which it appears.

(148)a. Ndakashama nekunzwa kúti musha wakatsvá.

b. Ndakashama kunzwa kúti musha wakatsvá.

(I was surprised to hear that the village had got burnt.)

(149)a. Sekúru vánofára nekúti upóte uchísvika pánó.

b. Sekúru vánofára kuti upóte uchísvika pánó.

(Uncle will be happy if you come here often.)

(150)a. Tine úrombó nekúti wakáshúwa zvakádaró.

b. Tine úrombó kúti wakáshúwa zvakádaró.

(We are sorry that you suffered such a mishap.)

Now consider the following pairs of sentences.

(151)a. Jéneti ánéta nekukuya.

(i. Jeneti is fed up with grinding.) or

(ii. Jeneti is tired because of grinding.)

b. Jéneti ánéta kukuya.

(Jeneti is fed up with grinding.)

(152)a. Mombe iyi yápera nekurúmwá nezvíkwekwe.

(i. This cow is covered all over with ticks (but not

necessarily emaciated)) or

(ii. This cow is emaciated by ticks.)

b. Mombe iyi yápera kurúmwá nezvíkwekwe.

(This cow is covered all over with ticks (but not necessarily emaciated).)

Note that in (151a) and (152a) are ambiguous as the English translation shows, but (151b) and (152b) are not. Notice also that it is the first reading of sentence (a) in each pair which tallies with that of the corresponding (b) sentence. To the extent that they are semantically equivalent, the sentences in the pairs in (151) as well as (152) are transformationally related. This relationship may be described in terms of the optional deletion rule mentioned above.

If, on the other hand, it is the second reading of the (a) sentences that is considered, then the (a) and (b) sentences in (151) as well as those in (152) are not related transformationally. The ambiguity in (151a) and (152a) is attributable to the verbs -neta and -péra which carry each at least two different meanings. Another interesting pair is the one in (153) in which, on the face of it, the sentences appear to be related structurally by the deletion transformation already referred to above.

(153)a. Ndanzwá nekutémwá némusoró.

(I have a severe headache.)

b. Ndanzwá kutémwá némusoró.

(I felt a headache for a while (but not necessarily a severe one).)

Apart from their difference in meaning the pseudo-cleft transformation also shows that these sentences are not transformationally related. This is illustrated in (154) and (155) respectively.

(154) Kutémwá némusóro ndíko kwandánzwa náko. (cp 153a)

(It is a headache that I am suffering from very much.)

(155) *Kutémwá némusóro ndíko kwandánzwa náko. (cp 153b)

but Kutémwá némusóro ndíko kwandánzwa. (cp 153b)

(It was a bit of a headache that I had.)

In (153b) the complement clause kutémwá némusóro is a direct object of the verb -nzwa, and not a /na/ phrase. The difference in meaning between the sentences in (153), once more, is attributed to the different meanings which the verb -nzwa carries. In other words this difference in meaning is attributed to the subcategorizational statement of the verb -nzwa. That is, in (153a) -nzwa requires a /na/ phrase complement, but in (153b) it requires a direct object noun phrase.

Notice that it is possible to have two /na/ phrases of the instrumental type in one and the same sentence.

(156) Mombe dzápera nékufá mékurumwá némhesvi.

(The cattle have dwindled very much in number through death caused by the bite of the tsetse-fly.)

(157) Vanhu vaázwa mékurwára mékurumwá neumhutu.

(Many people are suffering because of an illness caused by the bite of mosquitoes.)

(158) Témba apenga nekúti Ruzvidzo naPasi vakabá mari yake
nekuvaóna vachinwá hwahwá hwéndhari ívo vasingáshánde.

(Temba alleges strongly that Ruzvidzo and Pasi stole his money because he saw them drinking beer which they had bought, but they are not working.)

6.1.5 Complement clauses introduced by kana [$\bar{+}$ participial] and zva [$\bar{+}$ participial] may also serve as time adverbials of a sort. The complement clauses in question are underlined in the examples which follow.

(159) Mungaénde zvényú kumbá kana mapédza basa ramurí kúita.

(You may go home when you have finished the work you are doing.)

(160) Kana ndapédza G.C.E. yangu ndinoda kuzoita ukoti.

(After I have gone through my G.C.E. I would like to do a nursing course.)

(161) Wadzanaí ndamuona zvaauya.

(I saw Wadzanaí when she came.)

(162) Tembo zvaabatwa vanhu vombofurwa nemhepo.

(Now that Tembo has been arrested people will breathe freely.)

These strings which are underlined seem to be noun phrases functioning as adverbials. As time adverbials, complement clauses introduced by either kana [$\bar{+}$ participial] or zva [$\bar{+}$ participial] tend to control agreements of class 16 rather than those of either class 8 or class 15 as the pseudo-cleft transformation will show. The sentences in (163) - (165) correspond to those in (159), (161) and (162) respectively.

(163)a. Kana mapédza basa ramurí kúita ndipo pamungaénde zvényú kumbá.

(Only when you have finished the work you are doing may you go home.)

b. *Kana mapédza basa ramurí kúita ndizvo zvamungaénde zvényú kumbá.

(164)a. Wadzanaí zvaauya ndipo pandamuona.

(When Wadzanaí came is when I saw her.)

b. *Wadzanaí zvaauya ndizvo zvandamuona.

(165)a. Tembo zvaabatwa vanhu ndipo povombofurwa nemhepo.

(Now that Tembo has been arrested is the time people will breathe freely.)

b. *Témbó zvaábatwa vanhu ndizvo zvovombofúrwá némhepo.

If the interrogative pro-form transformation with rinhi (when), which is used in place of chii with time adverbials, is applied, these underlined strings will be confirmed as noun phrases. As an illustration consider (159) and (161).

(166) Tingaénde zvédu kumba rinhi? (reply: kana mapédza basa ramuri
kuita)

(When are we free to go home? (reply: when you have finished the work you are doing))

(167) Wadzanaí wamuona rinhi? (reply: zvaáuya)

(When did you see Wadzanaí? (reply: when she came))

It seems clear therefore that the strings underlined in (159) - (162) are noun phrases.

In addition to functioning as subject, complement clauses introduced by kana [+consecutive] may also serve as concessive adverbials.

(168) Kana mapúrisa akapatarika zváwo séi Kóngó havámbomuóná.

(No matter how the police search for Kongo they will never find him.)

(169) Tichávaóná chéte kana vakapfúúra nekúno.

(We shall certainly see them if they pass through here.)

That the adverbials in (168) and (169) are noun phrases is supported by the pseudo-cleft test. As was the case with the time adverbials mentioned above the complement clauses here control the concords of class 16 rather than that of either class 8 or class 15.

(170) Kana mapúrisa akapatarika zváwo séi Kóngó ndípo pavásingámbo
muóná.

(No matter how much the police search for Kongo they will not get him.)

(171) Kana vakapfúúra nekúno ndípo chéte patíchávaóna.

(If they pass through here it is only then that we shall

see them.)

6.1.6 Complement Clauses in both subject and object positions

In Chapter Five we saw that complement clauses could occur in both subject and object positions in one and the same sentence. In this section I should like to pursue this question further, and show the interdependency of the complementizers. My investigation in this regard seems to indicate that there is need to group the verbs, which have the privilege of occurring with such multiple noun phrase complements, into two, viz. those represented by -réva (mean; say), -taura (speak, talk), and -ratidza (show) which I will label as verbs of "meaning", and those which are represented by -ita (do, cause), -kónzera (cause, be result of) and -rúnzira (cause), which I shall call verbs of "causation". Since the occurrence of complement clauses in positions other than subject and direct object is relatively little understood at the moment I shall confine my study in this section to complement structures that may occur in subject and direct object positions only.

6.1.6.1 Verbs of "meaning"

With verbs of "meaning" the complement clause in ^a subject position may be introduced by any of the complementizers save kuti $\sqrt{+}$ indic., but the object complement clause may be introduced by kuti $\sqrt{+}$ indicative or ku $\sqrt{+}$ infinitive, the latter being accompanied by possessivization (for this possessive see subsection 2.12). Below are illustrative sentences with verbs of "meaning".

A. kuti $\sqrt{+}$ subjunctive in subject position

(i) kuti $\sqrt{+}$ subjunctive ----- verb ----- kuti $\sqrt{+}$ indicative -----

(172) Temba kuti ásviké pamushá pátezvara wáke zvinorevá kuti ákabvisa chimanda.

(For Temba to set foot at his father-in-law's home implies that he has paid out the chimanda beast in the marriage negotiations.)

- (173) Kuti Masawi' ábvumé kúbhadhara imwe mari' yaári' kúenzi ákaba' zvinoratidza kuti ndiye akaitóra.

(For Masawi to agree to pay some of the money which he is alleged to have stolen shows that he is the one who took it.)

- (174) Kuti ásviké nguva' ino ásatí ásvika' zvinotaura kuti haáchasvika' nokuti mabházi óse ápera.

(That he has not yet arrived until now means that he will no longer come since all the buses have gone.)

- (ii) kuti /+ subjunctive/ ----- verb ----- ku /+ infinitive/ -----

- (175) Kuti Pesi' átakúre tsága rechibagé' zvinoratidza kugwinya kwaké.

(For Pesi to lift a bag of mealie meal shows his strength.)

B. kana /+ participial/ in subject position

- (i) kana /+ participial/ ----- verb ----- kuti /+ indicative/ -----

- (176) Kana úsina' kumuóna' zvinoreva' kuti átiiza.

(If you did not see him it means that he has run away.)

- (177) Kana Juru' ákariga' musasa' uye zvinoratidza kuti murume ané simba.

(If Juru felled that musasa tree it shows that he is a strong man.)

- (178) Kana wagógodza' Rozi' akarega kudaira' zvinoreva' kuti ané chíkomba mumba' imomo.

(If you knocked at the door and Rose did not answer it means that she is with her boy-friend in that room.)

- (ii) kana /+ participial/ ----- verb ----- ku /+ infinitive/ -----

- (179) Kana Juru' ákariga' musasa' uye zvinoratidza kuvé kwaké murume ané simba. (see 177)

- (180) Kana wagógodza' Rozi' akarega kudaira' zvinoreva' kuvé kwaké nechikomba mumba' imomo. (see 178)

In (176) - (180) kuti can be used readily in place of kana.

C. kana /+ consecutive/ in subject position

(i) kana /+ consecutive/ ----- verb ----- kuti /+ indicative/ -----

(181) (Kana) akasaúya nhási zvakáre zvinoreva kuti pane zvakasara zvoitika kumusha.

(If he does not come again today it will mean that there is something that happened at home after my departure.)

(182) (Kana) ambuya vakanorarako zvinotaura kuti Magorimbo arwra chaizvo.

(If grandmother spends the night there it will imply that Magorimbo is seriously ill.)

(ii) kana /+ consecutive/ ----- verb ----- ku /+ infinitive/ -----

(183) (Kana) ukaenda kumba kwaMashiri zvakare iwe wakambotukwako zvakadaro zvingaratidze kuve rombe kwako.

(If you go to Mashiri's house again after you have been scolded that much it would show your stupidity.)

(184) (Kana) vavakidzani vakapota vachiyamurana zvinopangidza kunzwana kwavo.

(If neighbours help one another from time to time it is a sign that they are on good terms.)

In (181) - (184) kana is optional as was pointed out in subsection 2.6.

D. ku /+ infinitive/ in subject position

(i) ku /+ infinitive/ ----- verb ----- kuti /+ indicative/ -----

(185) Ramudzo kusvika nhási zvinoreva kuti akapedza basa.

(For Ramudzo to come today means that he finished his work.)

(186) Ndoro kusvipa kumeso kudaro zvinoratidza kuti ari kunwa chikokiya.

(For Ndoro to have such a dark face implies that he is taking skokiaan beer.)

(ii) ku /+ infinitive/ ----- verb ----- ku /+ infinitive/ -----

(187) Kuzadza kwake dura kunoratidza kushanda kwake nesimba.

(His filling the barn with grain shows how hardworking he is.)

(188) Mukúwasha kusaomberana naátezvara zvinoreva kusawirirana kwavó.

(For a son-in-law not to clap his hands when greeting his father-in-law indicates their not getting on well together.)

The infinitive serving as subject may be a free infinitive as in (188) or an infinitive which is necessarily accompanied by a possessive as in (187).

E. zva $\sqrt{+}$ participial in subject position

(i) zva $\sqrt{+}$ participial ----- verb ----- kuti $\sqrt{+}$ indicative -----

(189) Zvaasina kudaira kugogodza kwawaita zvinotaura kuti ane chikomba mumbamo.

(Since she did not answer your knock it means that she is with her boy-friend in the room.)

(190) Tembeni zvaari kungorutsa-rutsa zvinoratidza kuti ava nepamuviri.

(Since Tembeni is vomiting from time to time it shows that she is pregnant.)

(ii) zva $\sqrt{+}$ participial ----- verb ----- ku $\sqrt{+}$ infinitive -----

(191) Zvaasina kudaira kugogodza kwawaita zvinotaura kuve kwake nechikomba mumbamo. (see 189)

(192) Tembeni zvaari kungorutsa-rutsa zvinoratidza kuve nepamuviri kwake. (see 190)

6.1.6.2 Verbs of "causation"

With verbs of "causation" the complement clause in subject position may be introduced by any of the complementizers except kuti $\sqrt{+}$ indicative, but the object complement clause may be introduced by kuti $\sqrt{+}$ subjunctive or ku $\sqrt{+}$ infinitive only. The infinitive may be free or accompanied by a possessive.

A. kuti $\sqrt{+}$ subjunctive in subject position

(i) kuti $\sqrt{+}$ subjunctive ----- verb ----- kuti $\sqrt{+}$ subjunctive -----

(193) Kuti mugare muchirwa zvinokonzera kuti murambane.

(For you to be always fighting will eventually lead you into divorce.)

- (194) Kuti ndidzokere kuchikoro zvinokunda kuti ndiramba ndichiita basa reumabharani.

(For me to go back to school is better than continuing as as a clerk.)

- (195) Kuti uitewo rako gejo zvinobatsira kuti urege kunetsana nababa pakurima.

(For you to have your own plough will help you avoid trouble with your father at ploughing time.)

(ii) kuti /+ subjunctive/ ----- verb ----- ku /+ infinitive/ -----

- (196) Kuti mugare muchirwa zvinokonzerá kurambana. (see 193)

- (197) Kuti ndidzokere kuchikoro zvinokunda kuramba ndichiita basa reumabharani. (see 194)

B. kana /+ participial/ in subject position

(i) kana /+ participial/ ----- verb ----- kuti /+ subjunctive/ -----

- (198) Kana Nyasha anga asingateré makore ose aya zvichaíta kuti anyimwe munda.

(If Nyasha has not been paying his tax all these years this will cause him to be denied a plot of land.)

- (199) Kana mombe dzaSoko dzadya mumunda maGavi zvichakonzerá kuti vavengane.

(If Soko's cattle have laid waste Gavi's crop this will make them enemies.)

(ii) kana /+ participial/ ----- verb ----- ku /+ infinitive/ -----

- (200) Kana Mago achipota achienda kunonwa hwahwa mumisha zvichamuranzira kudzingwa chikoro.

(If Mago is in the habit of going out to drink beer in the villages this will cause him to be expelled from school.)

- (201) Kana Mushonga áchiíta bása rekúrandá vanhu mari yávo zvícha-
mukónzera kugara achitéverwa némapúrisa.

(If Mushonga is fond of robbing people of their money this
 will result in his being closely watched by the police.)

C. kana /+ consecutive/ in subject position

- (i) kana /+ consecutive/ ----- verb ----- kuti /+ subjunctive/ -----

- (202) (Kana) ukagara uchirwa nemukadzi zvinokonzera kuti murambane.

(If you fight with your wife often this will bring about
 your divorce.)

- (203) (Kana) munhu ukava muranda wekachasu zvinoita kuti chitaka
chako chioré pakugumísira.

(If you become a slave of kachasu spirit this will cause you
 to have cancer of the liver in the end.)

- (ii) kana /+ consecutive/ ----- verb ----- ku /+ infinitive/ -----

- (204) (Kana) murume nemukadzi vakagara vachirwa zvinokonzera
kurambana.

(If a man and his wife are always fighting this will lead
 to their divorce.)

- (205) (Kana) ukajaira kuchovha makasa zvinoronzira kufa uchibaiwa
nebanga.

(If you develop the habit of gambling for money this will
 lead you to your death by stabbing.)

Notice that in (202) - (205) kana is optional.

D. ku /+ infinitive/ in subject position

- (i) ku /+ infinitive/ ----- verb ----- kuti /+ subjunctive/ -----

- (206) Kugara chete kunoita kuti muviri urukutike.

(Idleness makes the body weak.)

- (207) Kushanda nesimba kunobatsira kuti munhu ubudirire.

(Working hard helps one to be successful.)

(208) Kuchovha makasa kunorúnzirá kúti munhu úité úbhinya.

(Gambling for money will lead one to become a thug.)

(ii) ku /+ infinitive/ ----- verb ----- ku /+ infinitive/ -----

(209) Kunyarara kunokúnda kurwa.

(Keeping quiet is better than fighting.)

(210) Kusanzwa kunokónzera kutambudzika pashure.

(Lack of understanding is the forerunner of troubles.)

E. zva /+ participial/ in subject position

(i) zva /+ participial/ ----- verb ----- kuti /+ subjunctive/ -----

(211) Mukoma zvaakona kuenda kumusha zvichaíta kuti ini ndiendeko.

(Since my elder brother has failed to go home this will make me go there instead.)

(212) Zvawaramba uchitamba nemuramu wako nemutowo iwoyo zvichakukonzera kuti utaudzane nemukadzi izvi.

(Since you continue to play about with your sister-in-law in that way, this will bring about misunderstanding between you and your wife.)

(ii) zva /+ participial/ ----- verb ----- ku /+ infinitive/ -----

(213) Zvawaramba uchitamba nemuramu wako nemutowo iwoyo zvichakukonzera kutaudzana nemukadzi izvi. (see 212)

6.1.6.3 Distributional Chart of Complementizers

The distribution of complementizers in multiple complement clauses is summarized below. The sign /+ / in the table below indicates a combination that is allowable.

A distributional Chart of Complementizers

in object position

		KUTI [+indic]	KUTI [-subj]	KANA [-partic]	KANA [-consec]	KU [-infin]	ZVA [-partic]
	KUTI [+indic]						
	KUTI [-subj]	+	+			+	
	KANA [-partic]	+	+			+	
	KANA [-consec]	+	+			+	
	KU [-infin]	+	+			+	
	ZVA [-partic]	+	+			+	

in subject position

6.2 Verb Phrase Complements

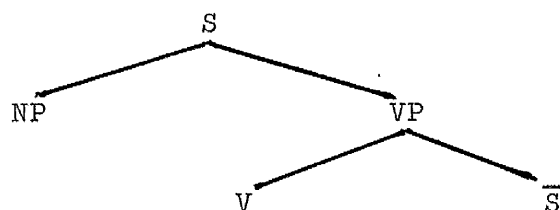
The case for verb phrase complements was argued in Chapter One. In that chapter it was stated that the complement clauses which do not come under the domination of NP, that is, those which do not pass the tests for noun phrases, are considered to be directly dominated by VP. In this section I should like to look at the different types of VP of which these complements are constituents. I must point out at the outset that the position with regard to verb phrase complements does not appear to be as clearly defined as it is with the NP complements dis-

cussed in 6.1 above. While it is normal to talk of the grammatical function of a noun phrase complement in various positions, it is not clear what the grammatical function of a verb phrase complement is.

Broadly speaking, complement clauses of the type under discussion can complement two types of verbs. First, they can occur as complements of verbs which are expressive of modality or adverbiality. Secondly, there are those which show the extent to which the action (or state) of the higher verb is carried out (or entered into). I discuss each of these two types in turn.

6.2.1 Verb Phrase Complements of the first type

These occur in a structure of the type shown below in which \bar{S} is the complement in question.



(216) Chibagé chínofanírá kúiswá féteréza yepámusoró mazú

In the examples below, a

(see 214)

plement clauses in quest

(217) Sekúru áchangúnó kudya.

A. Complement clauses introduced by kuti [+ subjunctive/

(214) Chibagé chínofanírá kúti chíiswé féteréza yepámusoró mazúvá

(214) Chibagé chínofanírá kúti chíiswé féteréza yepámusoró mazúvá

(The maize crop should be top-dressed with fertilizer these days.)

(215) Rósa ndíye akásaka kuti ndíendé kúdhoróbha.

(Rosa was the one who made me go to town.)

B. Complement clauses introduced by ku [+ infinitive]

(216) Chibagé chínofanírá kúiswá féteréza yepámusoró mazúvá áno.

(see 214)

(217) Sekúru áchangúnó kudya.

(Uncle is still having his meal.)

(218) Mangwana ticháfuma kunorima mudoro.

(Tomorrow we shall go early in the morning to plough in the garden.)

(219) Vana vanogona kunzi váúyé néChipiri.

(The children can be made to come on Tuesday.)

In the following sets of examples the complementizer formative is obligatorily deleted (see also 2.8).

C. Complement clauses introduced by kana [+participial]

(220) Vana vakáramba vachitaura vanzi naticha nyararai.

(The children kept on talking after they had been told by the teacher to keep quiet.)

(221) Ndinógara ndichiéndá kumusha mwedzi yose kumóná amai.

(I go home every month to see my mother.)

(222) Tuli akachitémwa chematsénganzungu akabva aparuma pasi.

(Tuli was given a hard blow on the cheek and fell down (lit. bite the ground))

D. Complement clauses introduced by kana [+consecutive]

(223) Wagóna ukabva wasvika, tanga toshupika.

(You did well to arrive now, we were getting worried.)

(224) Vana vaíta vakarega kuyambuka mhiri nhási vainge vadziviri-rwako nemvura.

(It's a mercy the children didn't go over the river, otherwise today they would have been cut off by the floods.)

6.2.1.1 Modal-like verbs

With the meaning that the verbs in the higher sentences express in these sentences, the verbs in (214) - (224) must occur with a complement clause. Another pertinent observation is that these verbs do not seem to be true verbs semantically. Some of them indicate modality as in (214) -fanira (must, ought) and -gona (can). in (219). Semantically

these compare very well with the English modals can, must, shall, have etc. Others express an adverbial idea of one kind or another as in (217) -ngúno (do to this time, still); (218) -fuma (do early in the morning); (220) -ramba (do continuously); (221) -gara (do often, always); (222) -bva (do then); and (223) -gona (do well, it is a good thing that ----). Nevertheless, structurally they behave like any other verb. These adverbial-like verbs require embedded sentences as their complements. Normally no material is permitted to intervene between them and their complement clauses. Adverbial enclitics like -su (expressing dissatisfaction), -wo (also) and -ka (form of emphasis) may however occur with the higher verb in these sentences.

(225) Chibagé' chinofanírásu kuiswa feteréza yepamusóro mazúva' ano?

(sp 216)

(Should the maize crop really be top-dressed with fertilizer these days?)

(226) Chibagé' chinofaníráwo kuiswa feteréza yepamusóro mazúva' ano.

(The maize crop should also be top-dressed with fertilizer these days.)

(227) Chibagé' chinofaníraka kuiswa feteréza yepamusóro mazúva' ano.

(The maize crop should certainly be top-dressed with fertilizer these days.)

6.2.1.2 Contracted Infinitives

Included in this type of verbs are those which may be accompanied by contracted infinitives. In (228) - (231) the verbs are followed by full infinitives. But in (232) - (235) these same verbs are accompanied by contracted infinitives. The meaning of the sentences in (232) - (235) is the same as that of the corresponding sentences in (228) - (231).

(228) Kunzé' kwanyanya kupísei' kukadái?

(Why is it so hot?)

(229) Jáke' áfuma kuenda kunotéma mapango.

(Jack went to cut poles early in the morning.)

(230) Nyatsa' kudya' zvako', pachine' nguva'.

(Take your time to have your meal, there is still time.)

(231) Kana waenda' kuchit'oro uchimb'idze kudzoka.

(When you go to the store, do come back early.)

(232) Kunze' kwanyanyopisei' kukadai?

(233) Jeke' afumoenda kunotema' mapango.

(234) Nyatsodya' zvako', pachine' nguva'.

(235) Kana waenda' kuchit'oro uchimb'idzodzoka.

With the verb -nguno (do still) the terminal vowel never changes.

(236) Usamudaidze' achanguno' kuita basa randamutuma.

(237) Usamudaidze' achanguno'ita basa randamutuma.

(Don't call him, he is still doing the piece of work which I asked him to do.)

In the sentences above the infinitive contraction transformation is optional. With other verbs however this transformation is obligatory as in the following sentences:

(238)a. *Arara' kuchema' nemanyoka.

b. Ararochema' nemanyoka.

(She had stomach trouble all through the night.)

(239)a. *Mashiri' anogara' kuregerera mombe dzake' dzichidya' chibage' chaSaru.

b. Mashiri' anogaroregerera' mombe dzake' dzichidya' chibage' chaSaru.

(Mashiri often lets his cattle destroy Saru's maize crop.)

(240)a. *Sei' muchiswera' kutamba' vamwe vachiita' basa?

b. Sei' muchiswerotamba' vamwe vachiita' basa?

(Why do you spend the day playing while others are busy working?)

In the following pairs of sentences the uncontracted forms are even

more bizarre than those in (238a), (239a) and (240a). However the embedded clauses in the (b) sentences are no less contracted infinitives than those in (232) - (235) above.

(241)a. *Wamba kuóná Sará heré pánó?

b. Wamboóná Sará heré pánó?

(Have you seen Sara here at all?)

(242)a. *Zvaásina kuúyá ndóta kuenda kumushá ini.

b. Zvaásina kuúyá ndótóenda kumushá ini.

(Since he didn't come, I shall have to go home myself.)

(243)a. *Ndinónnda kuténgá chii kúchitóro?

b. Ndinónndoténgá chii kúchitóro?

(What shall I go and buy from the store?)

6.2.2 Verb Phrase Complements of the second type:

In the second type the verb in the higher sentence is not necessarily accompanied by a complement clause in the same sense as was the case with the first type. The sets of sentences (244) - (247) and (248) - (251) illustrate this.

(244) Tii yácho yaíva yátonhora kúti vanhu váinwe.

(The tea was too cold for people to drink it.)

(245) Pasi páoma kuti murimé munda uyu iye zvino.

(The ground is too dry for you to plough this field now.)

(246) Ndakwana nenzára kuti ndiburitse ndima iyi.

(I am too hungry to finish this piece of work.)

(247) Sábhuku uyu átonga mhósva dzakawanda kuti átadze yako iyi.

(This headman has tried so many cases that he cannot fail to try yours.)

The verbs in the higher sentences in (244) - (247) appear below without complement clauses.

(248) Tii yácho yaíva yátonhora.

(The tea was cold.)

(249) Pasi' páoma.

(The ground has become dry.)

(250) Ndakwana nenzára.

(I am very hungry.)

(251) Sábhuku uyu átonga mhósva dzakáwanda.

(This headman has tried many cases.)

Admittedly there is a slight difference in connotation between the verbs in the higher sentences in (244) - (247) and the corresponding verbs in (248) - (251). It is quite clear though that the verbs in these pairs of sentences are related to one another in the same manner. In (244) - (247) it is implied that the action (or state) of the verb in the higher sentence is carried out (or entered into) to such an extent that something happens or fails to happen. The complement clause fills in this latter part. The verbs in (248) - (251) on the other hand merely express the action (or state) without indicating the extent to which that action (or state) is done (or entered into).

One other noteworthy point is that the verb in the higher sentence may be stative or non-stative. By stative here is meant inchoative, that is, verbs which are capable of expressing a present meaning although they may be in the past form. With stative verbs (and adjectives also) the complement clause follows immediately as in (252) - (256) as well as in (244) - (245). The element which signals the presence of the complement clause is not overtly expressed with these verbs.

(252) Zviyo' izvi zvawanda kuti zvikwané mudura umu.

(This finger millet grain is too much for it all to be put into this granary.)

(253) Pesi' akura kuti ávé mubhuku rechina.

(Pesi is too old to be in Grade Four.)

(254) Imbá yédu idiki kuti itirwe bira.

(Our house is too small for the bira to be performed in it.)

(255) Ndafa nenyota yedoro kuti ndimbosvika kumba ndigozodzokera kubhawa.

(I am too thirsty for beer for me to go home and then come back to the beer hall.)

(256) Aguta hwahwa kuti atyaire motokari.

(He is too drunk to drive a car.)

But with non-stative verbs it is necessary to insert into the object noun phrase an adjective or a relative clause which expresses quantity before the complement clause in question is supplied. And if the non-stative verb is not followed by an object noun phrase, an adverbial of frequency is added before the complement clause is supplied. Sometimes even if there is an object noun phrase the adverbial of frequency replaces the adjective or relative clause of quantity.

(257) Mari aona zvakawanda kuti atorwe mwoyo nevasikana vakaita saSekai.

(Mari has seen too many things to be attracted to such girls as Sekai.)

(258) Ndanzwa zvinhu zvizhinji muupenyu hwangu kuti nditirimuke zvauri kutaura.

(I have heard too many things in my life to be affected by what you are saying.)

(259) Sekuru vakauya kuno kuDomboshava kazhinji chaizvo kuti vataike.

(Uncle came here to Domboshava so many times that he won't get lost.)

(260) Mvura yapenya chaizvo manheru ano kuti irege kunaya usiku.

(There was so much lightning this evening that it can't fail to rain during the night.)

If the element which expresses quantity or frequency is left out from

(257) - (260) the resulting sentences are either ungrammatical or bear a different meaning altogether.

(261) *Mari' aona zvinhu kuti atorwe mwoyo nevasikana vakaita saSekai. (*Mari has seen things for him to be attracted to such girls as Sekai.)

(262) *Ndanzwa zvinhu muupenyu hwangu kuti nditirimuke zvauri kutaura. (*I have heard things in my life to be affected by what you are saying.)

(263) *Sekuru vakauya kuno kuDomboshava kuti vataike.
(*Uncle came here to Domboshava to get lost.)

(264) *Mvura yapenya manheru ano kuti irege kunaya usiku.
(*There was lightning this evening that it can't fail to rain during the night.)

These sentences are ungrammatical if in place of the adjective or relative clause of quantity we put in any other qualifiers.

(265) *Mari' aona zvinhu zvikuru kuti atorwe mwoyo nevasikana vakaita saSekai.
(*Mari has seen great things to be attracted to such girls as Sekai.)

(266) *Ndanzwa zvinhu zvinonakidza muupenyu hwangu kuti nditirimuke zvauri kutaura.
(*I have heard interesting things in my life to be affected by what you are saying.)

6.3 Summary

In this chapter I have tried to show the grammatical distribution, or function, in sentences of complement clauses, both those that are dominated by NP and those dominated directly by VP. From the account given above it is evident that the role of complement clauses in Shona cannot be minimized. We see them function as subjects, objects and also as adverbials of one kind or another.

7.0

SOME RESIDUAL PROBLEMS

The account given in the foregoing chapters of sentential complements in Shona is by no means exhaustive. There are many areas which have as yet to be investigated. Some of these areas are outlined briefly below.

7.1

Relationship between verbs and ideophones

The relationship between verbs and ideophones in sentences like the following requires further investigation. Both the ideophones and the complement clauses are underlined.

- (1) Chimuti' chakati' pwa kutyoka.

(The stick got broken.)

- (2) Roni' anogara akati' zii' kunyarara.

(Roni is always quiet.)

- (3) Damba' rakati' bu kuwa mumuti.

(A wild orange fell down from a tree.)

The subjects of the infinitives kutyoka in (1), kunyarara in (2) and kuwa in (3) are clearly chimuti, Roni and damba respectively. Therefore it is uncontroversial that these three infinitives are embedded clauses of some sort. It is interesting to note that the meanings of these infinitive verbs and that of the preceding ideophones are the same. These explanatory infinitives, as I may call them, are added to the sentences so as to make explicit the meanings of the ideophones, for it is not infrequent for an ideophone to express more than one meaning as in (4) and (5).

- (4)a. Mvura' yakati' pwa kutinhira.

(There was lightning and great thunder.)

- b. Rumuti' rwakati' pwa kutyoka.

(A stick got broken.)

- (5)a. Mombe ndakaiti dzi nedemo kutema.

(I cut the ox with an axe.)

b. Nyatsóti dzi kumírá.

(Stand upright.)

In cases where the meaning of an ideophone is unambiguously clear, either because the ideophone has only one shade of meaning or from the context, this explanatory infinitive need not be present.

These explanatory infinitives may also accompany other verbs as in (6) below.

(6)a. Sadza mdakárirákashá kudya.

(I ate a lot of sadza.)

b. Vana' vakadyisa mumunda mangu ndakávarákashá kurova.

(As for the children who let their animals destroy my field
I thrashed them severely.)

c. Chibage' ndakáchirákashá kutéma.

(As for the maize crop I cut down a lot of it.)

The verb -rákashá in (6) carries a slightly different connotation in each sentence as is indicated by the explanatory infinitives which are underlined.

Notice also that if the preceding verb is in the passive, the verb in the explanatory infinitive will of necessity be in the passive form also.

(7)a. Rumuti' rwakanzí pwa kutyorwa.

(The stick was broken.)

b. *Rumuti' rwakanzí pwa kutyóra.

(8)a. Mombe yakanzi dzi nedemo kutemwa.

(The ox was cut with an axe.)

b. *Mombe yakanzi dzi nedemo kutéma.

(9)a. Chibage' chakarakashwa meni' kutemwa.

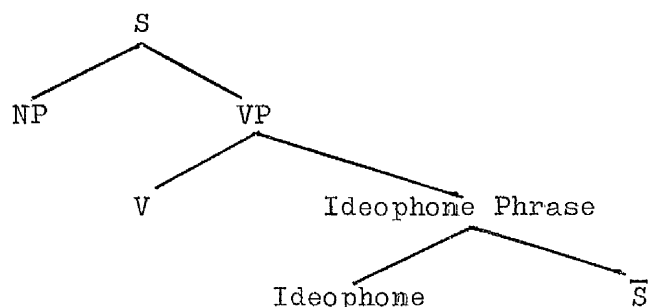
(The maize crop was hewn down by me.)

b. *Chibage' chakarakashwa meni' kutéma.

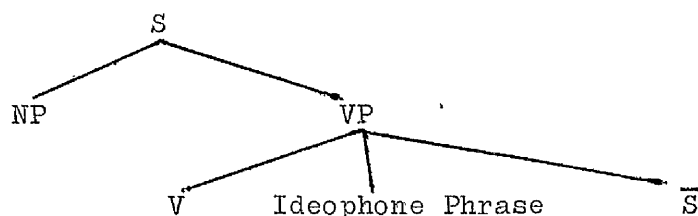
Observe also that complement clauses which occur after ideo-

phones are restricted to those which are introduced by ku /+ infinitive/ only as the examples in (1) - (9) above show.

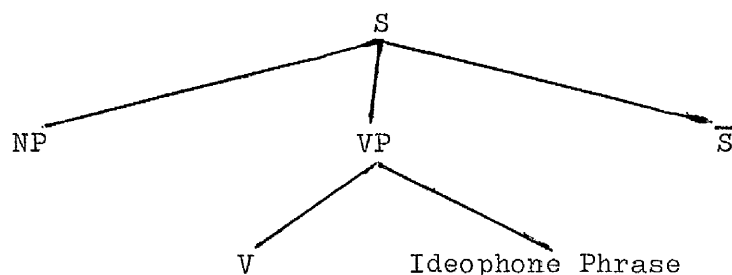
However, what is not immediately clear to me is how to characterize these explanatory infinitives in terms of deep and surface structure. That is, should they be regarded (a) as ideophone complements in which case they would appear in structures like the following:



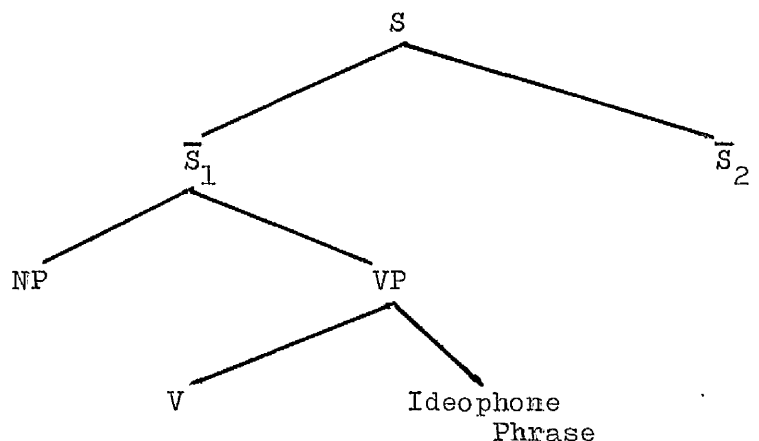
in which \bar{S} will give rise to the explanatory infinitive;
or (b) as verb phrase complements



or (c) as sentence complements



or (d) even as a conjunct of some kind.



Since the ideophone and the explanatory infinitive complement each other it would appear it is preferable to treat the explanatory infinitive as a verb phrase complement. This would make them sister nodes. It must be emphasized though that I am merely stating a preference rather than making a statement of fact.

Verbalized ideophones may still be accompanied by explanatory infinitives in the same way that plain ideophones are.

(10) Pení' ákapwátíká kúseka.

cp. Pení' ákátí pwátí kuseka.

(Peni burst out laughing.)

(11) Nyóká yákamukon'óra kurúma págumbo.

cp. Nyóká yákamúti kon'o kurúma págumbo.

(The snake struck him on the leg.)

(12) Ruzvidzo ákabvótómoka kutaura padare.

cp. Ruzvidzo ákátí bvótomo kutaura padare.

(Ruzvidzo spoke unwisely at the court.)

The pairs of sentences in (10) - (12) seem to be related both structurally and semantically. But it has still to be determined precisely in what way they are related.

Notice also that if the verb in the explanatory infinitive is interchanged with the verbalized ideophone the resulting string is ungrammatical.

(13) *Peni' áseka kupwatika. (cp. 10)

(14) *Nyoka yákamuruma kukon'ora. (cp. 11)

(15) *Ruzvidzo ákataura kubvótómoka padare. (cp. 12)

This applies equally to verbs like -rakasha which readily accept explanatory infinitives.

(16)a. *Sadza ndakaridya kurakasha. (cp. 6a)

b. *Vana vakadyisa mumunda mangu ndakavarova kurakasha. (cp. 6b)

c. *Chibage ndakachitema kurakasha. (cp. 6c)

7.2

An aspect of the possessive construction

The following constructions are noun phrases which consist each of a head noun and a possessive.

(17) badza' rekusakurisa (a hoe with which to weed)

(18) mari' yekufambisa (money with which to travel)

The possessive construction in these noun phrases comprises a possessive morpheme and an infinitive verb. The infinitives in rekusakurisa and yekufambisa are no doubt embedded clauses. That they are embedded clauses becomes more obvious in sentences like the following:

(19) Toko' anoda' badza' rekusakurisa.

(Toko wants a hoe with which to weed (the field).)

(20) Bere akapa mwana' mari' yekufambisa.

(Bere gave the child some money for it to use on the journey.)

The grammatical subjects of the infinitive constructions kusakurisa and kufambisa in (19) and (20) are respectively Toko' and mwana'. The difficulty arises in how to characterize the noun phrases in (17) and (18). Precisely how is the possessive element, represented in these noun phrases by /e/, as well as the causative idea represented by the morpheme /is/, to be described in terms of deep structure? As a possible solution the possessive element may be generated by the phrase structure rules, and to account for the causative idea one might have to postulate an ab-

stract verb along the lines suggested by G. Lakoff.¹ For the moment I leave it as an open question as to how to describe the type of noun phrase in (17) and (18).

7.3 Complement clauses introduced by kuti [+subj] and ku [+infin]

Another problem relates to complement clauses introduced by kuti [+subjunctive] and ku [+infinitive]. We saw in the preceding chapters that some complement clauses introduced by kuti [+subjunctive] were synonymous with those introduced by ku [+infinitive]. Consider the following pairs of sentences for illustration.

(21)a. Dende ánoða kuti áténgé mótokari.

b. Dende ánoða kuténgá mótokari.

(Dende wants to buy a car.)

(22)a. Nyóká yácho ákáédzesera kuti áiróve ikabva yámusvípíra.

b. Nyóká yácho ákáédzesera kuirova ikabva yámusvípíra.

(As he tried to hit the snake it spat at him.)

(23)a. Tondi ábvúma kuti ádzokére kuno hwédza.

b. Tondi ábvúma kudzokera kuno hwédza.

(Tondi has agreed to return here tomorrow.)

(24)a. Unógona kuti uúyē nenguva yaúnoda.

b. Unógona kuúyá nenguva yaúnoda.

(You can come at the time you want.)

(25)a. Varángana kuti vatízé mujéri.

b. Varángana kutíza mujéri.

(They have planned to escape from prison.)

If there were a way of accounting for the synonymy of the sentences in the pairs (21) - (25) using a transformational rule(s), our grammar would be simplified. Since the difference between the members of each

1. George Lakoff in Irregularity in Syntax (1970); see also Robin T.

Lakoff in Abstract Syntax and Latin Complementation (1968).

pair lies in the complement clauses only, namely, that one is introduced by kuti [$\bar{+}$ subjunctive] and the other by ku [$\bar{+}$ infinitive], a solution would be to take one of the two complementizers as generated by the phrase structure rules and the other as introduced by an optional transformational rule under a certain stated condition, namely, that the subject of the complement clause must be identical with that of the higher sentence. Two objections to this solution immediately arise. First, these two complementizers are not always substitutable one for the other, as the pairs of sentences below show.

(26)a. Rozi' ákai'ta kuti aro'orwe chéte naHuni.

(Rose worked it in such a way as to get herself married by Huni.)

b. *Rozi' ákai'ta kuro'orwa chéte naHuni.

(27)a. Forómani ákapunya'ira kuti áone zveku'ita nenyaya yékudzingwa kwake basa.

(The foreman thought very hard about what he could do concerning his dismissal from work.)

b. *Forómani ákapunya'ira kuóna zveku'ita nenyaya yékudzingwa kwake basa.

(28)a. *Mwana' wako' abata kuti ábe.

b. Mwana' wako' abata kuba.

(Your child has started stealing.)

(29)a. *Anyarara kuti ácheme.

b. Anyarara kuchema.

(She has stopped crying.)

(30)a. *Vapedza kuti vataure zvaka'itika.

b. Vapedza kutaura zvaka'itika.

(They have finished narrating what happened.)

Given the transformational rule suggested above, (26b) and (27b) would be grammatical sentences, which they are not. There would be need then

for a caveat to this rule so that it excludes (26b) and (27b). Furthermore, since (28a), (29a) and (30a) are ill-formed, there would be need also to vary our transformational rule above so that it applies, not optionally, but obligatorily in these cases. With all these caveats it is doubtful whether in the end our grammar will be any simpler. Secondly, introducing ku [+ infinitive] transformationally seriously undermines the hypothesis that complementizers are present in deep structure which was otherwise convincingly argued for in Chapter Four. In any case it is highly questionable, if some complementizers are generated by the phrase structure rules while others are introduced transformationally, whether our grammar will achieve any reasonable level of descriptive adequacy at all. At the moment I know of no way of relating structurally within the generative transformational model the members of the pairs in (21) - (25).

8.0. CONCLUSION

In this study I have endeavoured to show the following points; firstly, it clear that an adequate linguistic description of Shona should take account of the fact that some embedded sentences are dominated by NP, while others are dominated directly by VP. Given the sentences

(1) Vanhu vazhinji vanotendera kuti Mwari ariko.

(Many people believe that there is God.)

(2) Kutu Mwari ariko zvinotenderwa nevahu vazhinji.

(That God exists is believed by many people.)

it is as easy to believe that the clause kuti Mwari ariko is an instance of the constituent S as it is to believe that it is an instance of the constituent NP. A linguistic description which does not postulate that the string kuti Mwari ariko is an S at some level of derivation cannot achieve empirical adequacy. However, taken in the context of (1) this string is functioning grammatically as a direct object noun phrase, hence passivization is possible as (2) illustrates. This string is a noun phrase in (1) because it passes the tests for noun phrases and it behaves like an NP. We are therefore able to say that a given complement clause belongs to one or the other of these two groups, that is NP complements and VP complements, by applying the tests for discovering noun phrases. It is claimed in this study that any complement clause which passes these tests is considered to be dominated by NP, while those which do not pass these tests are taken to be dominated directly by VP. One advantage of this approach is that once the tests for discovering simple noun phrases have been determined and established these same tests can be applied also to discover long and complex noun phrases. As has already been observed during the course of this discussion not all tests for noun phrases apply to every noun phrase in any given sentence.

For instance, noun phrases which function as adverbials have fewer tests applicable to them than noun phrases which are in an object position.

Besides, it has also been demonstrated conclusively that it is necessary to posit a head noun of either class 8 or class 15 (or class 16 in a few cases) for complement sentences which are dominated immediately by NP in order to account for the concordial agreement which these complement sentences govern. The other alternative, namely, to regard such an NP as expansible into *S* only has been shown to result in a very weak grammar. As I have already pointed out the position with regard to the complement clauses which are directly dominated by VP is not so clearly defined. With further investigation it may turn out that the verbs discussed in 6.2.1 would be better treated as modals, and not as verbs as such, although this is not immediately apparent to me. The second type of VP complements may also prove not to be a watertight grouping. For one thing they occur in sentences which express comparison. With further research into how comparison is achieved in Shona this type of VP complement may turn out to require a different characterization. For the purpose in hand however any complement clause which does not meet the tests for noun phrases is considered to be a VP complement.

It has also been shown that a linguistic description of Shona should include complementizers among its grammatical categories. Complementizers have a semantic content although sometimes this meaning is not easily and immediately extractable. Accordingly in any derivation which involves a complement clause complementizers will be specified in the deep structure, and not introduced into sentences transformationally. Furthermore, the grammatical category of complementizer (COMP) is taken to comprise two elements, namely, a complementizer formative and a mood. This study claims also that every sentence node starts as \bar{S} , implying that every sentence has a complementizer. In the case of the topmost \bar{S}

the complementizer formative will be deleted obligatorily by a convention. It has also been shown that complementizers subcategorize verbs and also that these complementizers are mutually exclusive.

Another point which emerged in this study is that a description of Shona will be more adequate if we adopt the transformational approach for deriving infinitival constructions and the lexicalist approach for the other derived nominals. While derived nominals are always dominated by NP, infinitives on the other hand may be dominated directly by either NP or VP.

APPENDIX APhrase Structure Rules for Shona

1. S \longrightarrow (PreS) NP + AUX + VP (PP) (ADV)ⁿ
2. PreS \longrightarrow ({ Imp. }
Q) (Neg.) ({ Passive
Pseudo-passive })
3. VP \longrightarrow { V ({ NP (NP)
PP
S })
COP + Pred. }
4. Pred. \longrightarrow { NP
PP
Adj.
Dem.
Sel.
Quant.
Poss. }
5. AUX \longrightarrow Tns (Aspect)
6. PP \longrightarrow P + NP
7. NP \longrightarrow { N (S)
NP + S }
8. S \longrightarrow COMP + S
9. COMP \longrightarrow { kuti $\overline{\wedge}$ + indicative $\overline{\wedge}$, kuti $\overline{\wedge}$ + subjunctive $\overline{\wedge}$,
kana $\overline{\wedge}$ + participial $\overline{\wedge}$, kana $\overline{\wedge}$ + consecutive $\overline{\wedge}$,
ku $\overline{\wedge}$ + infinitive $\overline{\wedge}$, zva $\overline{\wedge}$ + participial $\overline{\wedge}$,
 \emptyset complementizer }
10. ADV. \longrightarrow (Adv.) (Time) (Place) (Manner) (Frequency)
11. N \longrightarrow (mukómaná, mapángá, upfu -----)
12. V \longrightarrow (-róvá, -nyorá, -fámá -----)
13. Tns. \longrightarrow (a, ai, aka, cha, nga, no)
14. Aspect \longrightarrow chi
15. P \longrightarrow (na, sa, ir)
16. Adj. \longrightarrow (-kúru, -temá, -tsvá -----)
17. Dem. \longrightarrow (chi, va, ka -----)
18. Sel. \longrightarrow (-no, -ye)

19. Quant. —————→ (-osé, éggá)
 20. Adv. —————→ (chéte, bédzi, kani -----)
 21. Time —————→ (nhási, nezúro, mangwána, -----)
 22. Place —————→ (mumbá, kurukova, panzira -----)
 23. Manner —————→ (chikómaná, zvisihoma, zvinonwírwa mvúrá ----)
 24. Frequency —————→ (kaviri, rutatú, -----)

Abbreviations:

Adj. = Adjective;	ADV. = Adverbial;	Adv. = Adverb;
AUX. = Auxiliary;	COMP = Complementizer;	COP. = Copula;
Dem. = Demonstrative;	Imp. = Imperative;	N = Noun;
Neg. = Negative;	NP = Noun Phrase;	P = Preposition;
Poss. = Possessive;	PP = Prepositional Phrase;	Pred. = Predicate;
PreS = PreSentence;	Q = Question;	Quant. = Quantifier;
S = Sentence;	Sel. = Selector;	Tns = Tense;
V = Verb;	VP = Verb Phrase;	

APPENDIX B

The verbs which are listed below are grouped according to the complementizer or complementizers which they allow in their complement clauses.

1. Verbs which allow kuti [+ subjunctive] and ku [+ infinitive] in their complement clauses:

-bvuma (agree)	-chimbidza (hasten)	-da' (want, need)
-dziidza' (learn)	-edza (try)	-edzesera (attempt)
-funda (learn)	-funga (think)	-fungidzira (guess)
-gadzirira (be prepared)	-gadzira (prepare)	-gara (not to do)
-goma (manage)	-jaira' (be in habit of)	-kanganisa' (do wrong)
-kanganwa' (forget)	-kodzera (be worthy)	-kona (fail)
-koshiwa (forget)	-kungura' (regret)	-kwanisa' (be able)
-mira' (stop)	-natsa (do well)	-netsa (give trouble)
-ngwara (be wise)	-nonoka (be late)	-nyangadza' (spoil)
-nyanya (do excessively)	-nyara' (be ashamed)	-nyunyuta' (grumble)
-nzvenga' (avoid, dodge)	-nzwa' (hear)	-ramba (refuse)
-rangana (plot, discuss)	-sema' (detest)	-shinga (exert oneself)
-shora (despise)	-siya' (leave)	-tadza' (fail to do)
-teta' (be scared)	-tiza' (run away)	-tsika-tsika (hesitate)
-tsutsumwa' (be reluctant)	-tsvaga (seek)	-tya' (fear, be afraid)
-udza' (tell)	-vamba (begin)	-vavarira' (persevere)
-zengurira (be unwilling to exert oneself)	-zvonda (hate)	

2. Verbs which allow kuti [+ indicative] in their complement clauses:

-bheja (make solemn promise)	-bvotomoka' (speak unwisely)	
-bvuma (agree)	-bvunza (ask)	-cherechedza' (observe)

-dairá (believe)	-dziidzá (learn)	-fembérá (guess)
-funga (think)	-fungidzira (think)	-fushunúra (reveal)
-kanganisa (do wrong)	-kanganwa (forget)	-koshiwa (forget)
-natsa (do well)	-nyará (be shy)	-nyunyúta (grumble)
-nzwa (hear)	-óná (see)	-paridzá (preach)
-pfidza (confess)	-pika (swear)	-pindura (reply)
-pokana (refute)	-ramba (refuse)	-rangana (plot, discuss)
-rangarira (ponder)	-révá (mean)	-ripa (compensate for)
-séma (detest)	-shinga (exert oneself)	-shora (despise)
-tadza (fail to do)	-tanga (begin)	-taura (speak)
-tenda (thank)	-tendera (believe)	-tonderá (remember)
-tsanangura (explain)	-tsiidza (promise)	-tsutsumwa (be reluctant)
-tya (fear)	-vamba (begin)	-vanzá (hide)
-viga (hide)	-yeuka (remember)	-ziva (know)

3. Verbs which allow kuti [+ subjunctive] and kuti [+ indicative] in their complement clauses:

-bvuma (agree)	-funga (think)	-fungidzira (think)
-kanganisa (do wrong)	-kanganwa (forget)	-koshiwa (forget)
-natsa (do well)	-nyará (be shy)	-nyunyúta (grumble)
-nzwa (hear)	-ramba (refuse)	-rangana (plot)
-révá (mean)	-séma (detest)	-shinga (exert oneself)
-shora (despise)	-tadza (fail to do)	-tanga (begin)
-taura (speak)	-tenda (thank)	-tendera (believe)
-tonderá (remember)	-tsutsumwa (grumble)	-tya (fear)
-udza (tell)	-vamba (begin)	

4. Verbs which allow kuti + indirect question as direct object:

-bvunza (ask)	-cheréchédza (observe)	-dziidzá (learn)
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-fémberá (guess)	-fúnda (learn)	-funga (think)
-fúshunúra (reveal)	-gadzira (prepare)	-kángánwá (forget)
-koshiwa (forget)	-nanganidza (look at)	-nyúnyútá (grumble)
-nzwa' (hear)	-óná (see)	-óngóróra (examine)
-rangana (discuss)	-rangarira (meditate)	-shaya (be at a loss)
-tádza (fail to do)	-tsvaga (find)	-verenga (count)
-yeuka (remember)	-zívá (know)	-púnyáíra (be worried)
-tsanangura (explain)		

5. Verbs which allow ku $\overline{+}$ infinitive, but not kuti $\overline{+}$ subjunctive or kuti $\overline{+}$ indicative, in their complement clauses:

(a) Infinitives accompanied by possessives

-bátá (get used to)	-chinja (change)	-enzana (be alike)
-gúrá (give up bad habit)		-ísvá (do badly)
-kúrumídza (hurry)	-nyanya (do excessively)	
-nyárára (be quiet)	-pamhidza (do again)	-pórá (be cool)
-serera (subside)	-wanza (do many times)	

(b) Infinitives unaccompanied by possessives

-bátá (get used to)	-enzana (be alike)	-gúrá (give up bad habit)
-ísvá (do wrong)	-kwáná (be affected)	-kúrumídza (hurry)
-nyanya (do excessively)	-nyárára (be quiet)	-pamhidza (do again)
-pédzá (finish)	-pinda (get used to)	-pórá (be cool)
-serera (subside)	-wanza (do many times)	

6. Verbs which allow kuti $\overline{+}$ subjunctive, but not ku $\overline{+}$ infinitive, in their complement clauses:

-ita (do)	-páridzá (preach)	-téma (decide at court)
-súnga (decide at court)		-púnyáíra (be worried)

7. Verbs which allow kuti [+subjunctive] in their complement clauses in which the subject may or may not be identical with the one in the higher sentence:

-bvuma (agree)	-da' (want, need)	-edza (try)
-funga (think)	-fungidzira (think)	-gadzira (prepare)
-gadzirira (prepare)	-goma (manage)	-jáirá' (be in habit of)
-kángan'isa (do wrong)	-kángan'wa' (forget)	-koshiwa (forget)
-matsa (do well)	-netsa (be difficult)	-nyángadza' (make mistake)
-nyará' (be shy)	-nyunyúta' (grumble)	-mzwa' (hear)
-ramba (refuse)	-rangama (plot, discuss)	-réva' (mean)
-shinga (exert oneself)	-shora (contemn)	-tádza' (fail to do)
-tsútsumwa' (be reluctant)		-tsvaga (seek, find)
-tya' (fear)	-vávarira' (persevere)	-zvonda (hate)

8. Verbs which allow kuti [+subjunctive] in their complement clauses in which the subject may only be identical with the one in the higher sentence:

-chimbídza (hurry)	-dziídza' (learn)	-edzesera (attempt)
-funda (learn)	-gara (not to do)	-kodzera (be fitting)
-kungúra' (regret)	-mírá' (stop)	-momoka (be late)
-shéna'-shéna (do energetically)		-síya' (leave)
-tanga' (begin)	-tsika-tsika (hesitate)	-vamba (begin)
-zengurira (be unwilling to exert oneself)		-nanga' (go straight)

9. Verbs which allow kuti [+subjunctive] in their complement clauses in which the subject may not be identical to the one in the higher sentence:

-ita (do)	-kónzera' (cause)	-páridza' (preach)
-tema' (decide)	-sunga' (decide at court)	-tonga' (judge)

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